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The development of amphibious/expeditionary warfare in the United States and the United Kingdom, 1945-1968 : a study in comparison, contrast and compromise

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**THE DEVELOPMENT OF AMPHIBIOUS/EXPEDITIONARY WARFARE IN THE
UNITED STATES AND THE UNITED KINGDOM, 1945-1968:
A STUDY IN COMPARISON, CONTRAST AND COMPROMISE**

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ABSTRACT

Contemporary analysis has generally accepted that amphibious warfare development in the United States and the United Kingdom was quite similar, if not almost identical, during the Cold War. So-called ‘parallel courses’ of *similar* development, which had emerged during the inter-war years and continued to evolve during the Second World War, converged even further in the post-war era. This effectively culminated in national approaches (or systems) that most closely reflected the US Naval Service’s (*i.e.*, US Navy and Marine Corps) World War II model, which had been used with legendary success in the Pacific through 1945.

However, a comparative study of American and British developments from 1945 to 1968 at the *strategic*, *organisational/institutional* and *tactical/operational* levels of analysis reveals that there were significant, if not fundamental, differences. These variances—which had, in fact, materialised during the inter-war years and were consolidated during World War II—continued to evolve along parallel but *different* courses of development. In essence, they were based on *naval* versus *maritime* strategies, *single-service* versus *inter-service* (or *joint*) organizations/institutions, and *combined arms* versus *joint warfare* concepts, techniques and doctrine. One could arguably summarise these developmental trends as being *amphibious* and *expeditionary*, respectively.

Comparing these different courses of development is best accomplished by determining and analysing the similarly divergent evolutionary debates and changes that occurred *within* each subject country, specifically during the peacetime years when the most significant advances in concepts, tactics, techniques, and doctrine were made. Whilst these activities were particularly divisive in the late 1940s and 1950s (and even in the early 1960s), it was not until the mid-1960s that compromises were reached on both sides of the Atlantic, which made a convergence of amphibious/expeditionary warfare development apparent; but even this did not completely eliminate certain underlying national differences.

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INTRODUCTION

The term “amphibious operation” conjures up a myriad of famous battle scenes of which the ‘sands of Iwo Jima’ and the ‘beaches of Normandy’ stand out as amongst the most epic. While the historical consensus maintains that these two operations represent very similar—if not almost identical—martial endeavours, closer scrutiny exposes a number of significant differences at the *strategic, organisational/institutional* and *tactical/operational* levels of analysis.¹

Underlying this apparent dichotomy is the fact that “amphibious warfare” *per se* is a relatively new domain of military science, having only been categorised as such in the mid-twentieth century. Although the word ‘amphibious’ has been used to describe a ‘Kind of Warfare’ used to land troops on defended shores for nearly two-and-a-half centuries, the phrase “amphibious warfare” was not officially adopted in the military lexicon until *after* World War II, first by the Americans in 1946 and then by the British five years later as part of NATO standardization procedures.²

BACKGROUND

Whilst various forms of “amphibious warfare”—which generally consists of naval forces landing ground forces on hostile shores³—have been practised since ancient times,⁴ these types of operations have played a significant role throughout British and American history.⁵ From the

¹ See, most recently, Lewis, Adrian R., *Omaha Beach: A Flawed Victory* (Stroud: Tempus Publishing Ltd., 2004; first published 2001), Chapters 2 and 3. For more popular works, see Rottman, Gordon L., *US World War II Amphibious Tactics: Army & Marine Corps, Pacific Theater*, Elite 117; and *US World War II Amphibious Tactics: Mediterranean & European Theaters*, Elite 144 (Oxford: Osprey Publishing, 2004; 2006). For an example of contemporary analysis, see [Thacker, Joel D.], ‘The Development of Amphibious Tactics in the United States Navy (Preliminary)’, manuscript, NL, NHHC, n.d.

² Ian Speller, ‘The Role of Amphibious Warfare in British Defence Policy, 1945-64’, Ph.D. dissertation, King’s College, London, 1996, 68.

³ This later involved the use of air forces.

⁴ See, for example, Vagts, Alfred, *Landing Operations: Strategy, Psychology, Tactics, Politics, from Antiquity to 1945* (Harrisburg, PA: Military Service Publishing Co., 1946; 2nd printing, 1952), Part 2: ‘Ancient and Medieval Operations’; and Tucci, James M., ‘*Terra Marique*: Amphibious Warfare in the Ancient World’, Ph.D. dissertation, University of Wisconsin-Madison, 2003.

⁵ For an historical overview of early Anglo-American experience, see Vagts, Parts 3, 4 (201-452). For British experience, see ‘Literature Review’ for books by Creswell (Chapters I-VII), Fergusson (Chapter I), Foster (Chapter One), and Whitehouse (Chapters I-IV). For American experience, see books by Beaumont (Chapter I), Heintz (Chapters 1-3), Millett (Part One), Moskin (Part I), Simmons (Chapters 1-7), and Whitehouse (Chapters III-IV), plus Ohls, Gary J., ‘Roots of Tradition: Amphibious Warfare in the Early American Republic’, Ph.D. dissertation, Texas Christian University, 5/08; Reed, Rowena, *Combined Operations in the Civil War* (Annapolis, MD: NIP, 1978); Millett, Allan R., and Peter Maslowski, *For the Common Defense: A Military History of the United States of America* (New York,

seventeenth century onwards, the most significant of these enterprises were employed by both the British and, later, the Americans, in the form of so-called ‘conjunct expeditions’.⁶ Simply put, the army and navy worked together, although most often with the latter supporting the former by transporting and disembarking troops and supplies ashore to conduct land campaigns (*i.e.*, expeditions). Although the army also operated in support of the navy on occasion, the British and American institutionalisation of ‘marines’—as purely *naval* infantry—in the seventeenth and eighteenth centuries, respectively, ensured that navies could be supported by small numbers of ground forces whenever required, although this support was inherently limited. This occasional (but also sometimes important) use of marines in amphibious landings notwithstanding, by the end of the nineteenth century, both the United Kingdom (UK) and the United States (US) had generally pursued parallel and similar courses of what would most likely be referred to today as “expeditionary operations” (or “expeditionary warfare”).⁷

Due to varying strategic, organisational/institutional and tactical/operational changes that evolved during the first four decades of the twentieth century, these parallel *and similar* courses of development diverged into two parallel *but different* courses. In America, the US Naval Service,⁸ led by its Marine Corps—which had gained some amphibious experience from mostly smaller-scale, *naval* ‘landing operations’,⁹ embarked on a new course of ‘navy-centered’ amphibious development to counter the (naval) threat posed by Imperial Japan.¹⁰ As such, by the start of World War II, what had materialised after nearly forty years of development was based on: an almost purely “naval” strategy, which had its theoretical roots in the Mahanian concept of

NY: The Free Press, 1984); and Weigley, Russell F., *The American Way of War: A History of United States Military Strategy and Policy* (New York, NY: MacMillan, 1973).

⁶ Thomas M. Molyneux, *Conjunct Expeditions or Expeditions That Have Been Carried On Jointly by the Fleet and Army, with a Commentary on a Littoral War* (London: printed for R & J Dodsley, 1759).

⁷ See, for example, DN, HQ, USMC, MCDP 3, *Expeditionary Operations* (Washington, DC: DN, HQ, USMC, 4/16/98), 1—2 – 1—6.

⁸ The ‘US Naval Service’ is defined as the combination of the US Navy (USN) and the US Marine Corps (USMC) as organized within the Department of the Navy (DN).

⁹ For historical examples, see Ellsworth, Harry A., (Capt., USMC), *One Hundred Eighty Landings of United States Marines, 1800-1934: A Brief History in Two Parts*, 2nd reprint (Washington, DC: H&MD, HQ, USMC, 1974; first published 1934; first reprinted 1964).

¹⁰ For the US development of ‘navy-centered amphibious forces’ (as opposed to ‘army-centered amphibious forces’ and the British “‘combined” amphibious force’), see Potter, E. B. (CMDR, USNR), ed., *The United States and World Sea Power* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1955), 576-587.

‘Sea Power’; a “single-service” organisational/institutional methodology, which involved the US Navy and Marine Corps acting as the Naval Service (within the Department of the Navy); and corresponding tactical/operational “combined arms” concepts, techniques, and doctrine, which were mirrored by a matching force structure in the form of the USMC’s Fleet Marine Force (FMF).¹¹

During World War II, these aspects combined to enable the seizure and defence of limited (island) objectives as part of a larger naval campaign, as was specifically demonstrated by the ‘island hopping’ campaign in the Central Pacific. What was most characteristic about these ‘seizure’-type operations was that they centred on the attack in order to establish a *beachhead* ashore, which was at the same time the prerequisite and the ultimate objective for operational success. This was ultimately the result of the geographical setting in which they were employed, where the (island) objectives could be almost completely isolated by naval forces, thus precluding the reinforcement and/or resupply of the island defence. On the one hand, this meant that once a foothold or beachhead had been secured, the ‘battle’ had essentially been ‘won’ as the attacker would eventually prevail by simple laws of attrition. On the other hand, however, this also meant that the defenders were frequently driven to employ a defence ‘at the water’s edge’ in order to defeat any attempt at gaining said foothold/beachhead, which inevitably resulted in a very determined (if not fanatical) defence but one that was largely static and immobile (due to the relatively small land mass sizes) as well as lacking heavy weapons and equipment (due to the soft beach and jungle—plus monsoon—conditions). Other related and distinguishing characteristics included tactical surprise, dawn/daylight landings, extensive pre-bombardment by naval gunfire, close air support, and the use of amphibious tractors (‘amtracs’) to cross surrounding coral reefs. All of these features combined to earn these amphibious assaults the appropriate moniker of ‘storm landings’.¹²

¹¹ Lewis, 66-70; and [Thacker], 4-16. See also MacGregor, David, ‘Innovation in naval warfare in Britain and the United States between the first and second world wars’, Ph.D. dissertation, University of Rochester, 1989, Chapter IV.

¹² Lewis, 71-76; [Thacker], 102-106; and Rottman, Elite 117. See also Alexander, Joseph H., (Col., USMC, Ret.), *Storm Landings: Epic Amphibious Battles in the Central Pacific* (Annapolis, MD: NIP, 1997).

Great Britain, as a small island nation with only limited resources, had historically been forced to rely on the combined power of her army and navy to wage war against her enemies overseas. With the evolution of modern warfare into three dimensions (*i.e.*, land, sea, and air), this attention to what were known as ‘combined operations’—which incorporated *all* forms of *joint* operations, including (amphibious) landings on hostile shores—only increased, although mostly only conceptually due to the lack of a consistent enemy and the resulting variance in strategic priorities amongst the Services. What resulted during the approximately same timeframe prior to the Second World War, therefore, was based on: a “maritime” strategy, which had been theorised by Corbett as comprising the combined use of both the army and navy; an “inter-service” organisational/institutional methodology, albeit one which only involved the establishment of the Inter-Services Training and Development Centre (ISTDC) in 1938 to co-ordinate the joint efforts of all three Services; and corresponding “joint warfare” operational concepts, techniques and doctrine, albeit ones which were only loosely accepted by the services, mainly in the form of ‘combined operations’ doctrine.¹³

Nevertheless, during the Second World War, these aspects combined (or, more accurately, were *forced* to combine) to permit the seizure of effectively unlimited (continental) objectives as part of larger land campaigns, as was illustrated by the ‘invasions’ of North Africa and Europe during the Second World War. Also included in this class were the joint army-navy campaigns to invade and occupy the larger (continental-size) island land masses in the Southwest Pacific Area (SWPA), most notably New Guinea, Mindanao, Luzon, Borneo, and Leyte, which later influenced US Army views on *expeditionary* warfare (in contrast to the US Naval Service’s *amphibious* practice).¹⁴ What was most distinguishing about these ‘invasion’-type enterprises was that they not only depended on seizing a beachhead in the initial assault but also, and

¹³ Lewis, 49-54. See also MacGregor, Chapter IV; and Massam, David R., ‘British Maritime Strategy and Amphibious Capability, 1900-1940’, Ph.D. dissertation, Oxford University (Bodleian), 1995, Chapters III, IV, VI, VII.

¹⁴ These examples (and corresponding contrasts with the Central Pacific island/atoll objectives) were used in two lectures given by US Army Brigadier General D. A. D. Ogden in 1949 and 1951. See Master Lesson Plan [Engineer Center and Fort Belvoir], ‘Engineers in Tactical Operations’, [2/18/49] (MHI Stacks: U261.O322; AHEC); and Adjutant General, DA, ltr to Distr., ‘Lecture on “Amphibious Operations of Especial Interest to the Army” by Brigadier General D. A. D. Ogden’, 2/19/51 (Library; NDU).

arguably more significantly, focused on establishing and consolidating a larger *bridgehead* from which land operations could be initiated. This was also the result of the geographical setting involved, where the much larger (continental-sized) objectives with their extensive coastlines could not be as completely isolated physically (whether by naval and/or air forces), thus allowing the coastal defenders to be reinforced and resupplied. On the one hand, this meant that, even though an initial foothold/beachhead may have been gained, a much larger and expansive bridgehead was required to defeat any and all counter-attacks by enemy reinforcements (which also led to the occasional use of airborne troops by the invaders to penetrate deep inland). On the other hand, however, this also meant that the defences along the extensive coastlines were relatively weak (or even non-existent), which resulted in lightly opposed (or even unopposed) initial landings, although the available reinforcements and reserves were frequently of the heavier and more mobile variety (due to the conducive geography and superior transportation networks). Other related and distinguishing characteristics included strategic (or operational) surprise, pre-dawn/night landings, land-based air support, limited pre-bombardment (by naval gunfire and strategic air), the early landing of heavy weapons and equipment (*i.e.*, tanks, artillery, engineers, etc.), and massive logistical efforts and organisations.¹⁵

In effect, two *different* but still parallel types of warfare emerged between the United States and the United Kingdom between 1900 and 1945: *amphibious* and *expeditionary*, as presented below.

SUMMARY OF NATIONAL DIFFERENCES		
<u>Level of Analysis</u>	<u>United States</u>	<u>United Kingdom</u>
<i>Strategic</i>	“naval”	“maritime”
<i>Organisational/Institutional</i>	“single service”	“inter-service”
<i>Tactical/Operational</i>	“combined arms”	“joint warfare”
SUMMARY TERMS	“ <i>amphibious</i> ”	“ <i>expeditionary</i> ”

¹⁵ Lewis, 55-66, Chapter 3; [Thacker], 99-102; Rottman, *Elite* 144; and Boose, Donald W., Jr., (Col., USA, Ret.), *Over the Beach: US Army Amphibious Operations in the Korean War* (Ft. Leavenworth, KS: Combat Studies Institute Press, 12/08), 25-65. See also Ogden lectures.

SUMMARY, SCOPE AND LITERATURE REVIEW

Summary

Building on these parallel *but different* courses, this thesis compares and contrasts American and British amphibious/expeditionary warfare development in the first two decades after World War II. Generally speaking, whilst each country underwent an initial period of consolidating what had emerged as distinct and different national approaches during World War II, a gradual convergence of these developmental courses appeared to take place. This was most visibly indicated by the promulgation of a ‘sanitized version’ of the United States’ recently-adopted joint *Doctrine for Amphibious Operations* by NATO in 1968.¹⁶ However, as demonstrated by developments at primarily the organisational/institutional and tactical/operational levels, many underlying differences continued to remain.

At the former level, the US Naval Service effectively retained—through bureaucratic infighting over service roles and missions (as well as independence)—overall responsibility for amphibious warfare development even though this position was repeatedly (albeit largely unsuccessfully) challenged by the other services, particularly by the Army. The British, whilst elevating their Royal Marine Commandos from the exclusive role of amphibious raiders to that of light amphibious infantry in the mid-1950s, amalgamated the overall responsibility for amphibious warfare policy and doctrinal development into a new ‘Joint Warfare’ organisation in the 1960s. At the tactical/operational level, although the US armed forces had finally agreed to a joint *Doctrine for Amphibious Operations* and whilst the US Army and, to a lesser extent, the Air Force, had both continued to develop their own amphibious doctrines, the practice of amphibious landings remained almost exclusively a naval domain, as demonstrated by the considerable expansion of *naval* amphibious capabilities and by the fact that the majority of such operations early in the Vietnam conflict were conducted exclusively by *naval* (amphibious) forces. In the UK, although the Royal Marine Commandos had been given a principal role in smaller-scale

¹⁶ ___, ATP-8, *Doctrine for Amphibious Operations*, 11/7/68 (P1946CF: Box 407; OAB, NHHC), IIa.

amphibious operations, these enterprises were ultimately integrated into broader “joint warfare” operations, in which the Commandos continued to play a central, but by no means exclusive, part (even as amphibious infantry). This resulted not only from the fact that the core ‘seaborne/airborne/land operations’ concept was inherently joint but also because Britain’s amphibious force structure had to rely on elements from all of the Services to conduct independent, self-sustaining amphibious landings.

The convergence of these developmental trends as well as the continued existence of various underlying differences will be critically analysed by investigating the internal debates and developments that occurred within each subject country. As mentioned, in the United States, primary responsibility for amphibious warfare development was re-affirmed as being one of the primary functions of the Naval Service. The US Marines, having yet again faced the prospect of redundancy, were finally garnered legal recognition—and even protection—as amphibious assault specialists for their combat contributions in the Central Pacific. With this secured, the Marine Corps turned to the dual challenges of executing amphibious assaults in a nuclear geo-strategic environment whilst also functioning as a conventional (but eventually nuclear-capable) ‘force-in-readiness’. Most significantly, the Corps advanced the concept of ‘vertical envelopment’ which centred on the use of helicopters launched from helicopter carrier ships to transport amphibious assault troops ashore in an air-lifted ship-to-shore movement. Not only did this avoid beach obstacles and defences, but it also allowed a forward-deployed, amphibious force to disperse as a passive defence against nuclear weapon attack.

At the same time that these initiatives began, however, a growing debate emerged between the Naval Service and the Army. The latter, drawing on its own *expeditionary* experience in Europe and facing the increasing prospect of another continental enemy (were the Soviet Union to invade western Europe), began to question whether the former’s version of naval ‘amphibious operations’ or ‘seizures’ could be applied against a(n) (unlimited) continental foe. This debate was further complicated by the independence-minded Air Force, which disagreed

with the Naval Service's (and Army's) insistence on unified command in amphibious operations as the latter specifically subsumed all air support forces under naval (or army) command. As a result of these disagreements, the 'divergent views' of the Services became firmly entrenched during the 1950s, as illustrated by a failed attempt to formulate joint amphibious warfare doctrine and the concomitant promulgation of unilateral amphibious doctrine by each of the Services.

Compromises eventually ensued, however, and what had originally been a single-service *naval* approach towards amphibious warfare appeared to expand to include the unique aspects of larger-scale '*joint* amphibious operations' (or, more accurately, '*expeditionary* operations'), which were employed to initiate (unlimited) land campaigns. Evidence of this shift appeared in the 1960s with the agreement—first between the Navy/Marine Corps and the Army, in 1962, and amongst these services and the Air Force in 1967—to promulgate official joint amphibious warfare doctrine, which had undergone various stages of inter-service negotiations for a number of years. This apparent progression toward 'joint warfare' was not completely validated in practice, however, as conventional amphibious operations conducted during the Vietnam conflict were performed almost exclusively by naval forces.

In the United Kingdom, responsibility for 'combined operations' remained firmly vested in a permanent, independent, and jointly-staffed agency after World War II, known as Combined Operations Headquarters (COHQ) but later renamed Amphibious Warfare Headquarters (AWHQ). Although early efforts were made to eliminate this entity, primarily by the Admiralty, fears of a reversion to the inter-war years when few concrete advances had been made in this field due to the specific lack of a permanent (joint) system caused the British defence leadership to retain the COHQ organisation, although it had to be reduced in size due to financial constraints that affected the whole defence establishment.

The reasons for retaining the COHQ seemed to be increasingly validated in the early post war years due to the rising threat of the Soviet Union. Although the COHQ establishment first focused primarily on the traditional large scale 'combined operations', it also turned its attention

to other forms thereof, including ‘raiding’ and ‘beach organisation’ operations, in case of a potential return to the strategic situation similar to that of May, 1940. However, the realisation that more numerous and powerful nuclear weapons increasingly precluded the execution of large-scale, Normandy-type (expeditionary) “invasions” led to a distinct shift in strategy in the early 1950s. As a result, the British defence establishment—led by the Royal Navy—began to focus on how to deal with ‘cold’ and ‘limited’ war scenarios instead of a nuclear Third World War. What eventually emerged was a new requirement for standing, strategically-mobile intervention forces that could act as a deterrent and, more importantly, react quickly to limited contingencies from the Mediterranean to the Far East (*i.e.*, ‘East of Suez’), thereby precluding escalation into a wider—and potentially nuclear—conflict. Building on American conceptual experience, the fact that the Royal Marine Commandos had been elevated from their exclusive role as amphibious raiders to that of special light (amphibious) infantry, and their own limited (but operational) experience with the employment of helicopters as troop transports in Operation MUSKETEER (and later VANTAGE), the British pursued a new concept that involved the creation of joint (naval) task groups which centred on specially-converted ‘Commando (helicopter) carriers’ and special amphibious assault logistic shipping. These, in turn, were to be supported by conventional aircraft carriers.

Although this seemed to reaffirm a shift towards a purely *naval* approach to *amphibious* warfare—similar to that of the United States—a few significant factors kept this change a limited one. The central reason stemmed from conceptual advances at the tactical/operational level which evolved from the joint ‘seaborne/airborne/land operations’ concept into the even broader notion of ‘joint warfare’. This concept was based on the joint application of (limited) seaborne and airborne ‘strategic mobility’ assault capabilities to maximise British intervention potential, particularly east of Suez. This, in turn, caused a change at the higher organisational/institutional level where the ‘combined operations’ administration (formerly COHQ, now AWHQ) continued to exist, as did the specific responsibilities of the Chief of Combined Operations/Chief of

Amphibious Warfare (CCO/CAW) with regard to overall policy. Nevertheless, a new re-organisation was undertaken, which resulted in the creation in 1962 of a ‘permanent’ Joint Warfare Committee (JWC) organisation as well as a corresponding Joint Warfare Establishment (JWE). The entire AWHQ organisation was amalgamated into this new entity, which was ultimately responsible for the promulgation of amphibious operations doctrine, although under the broader rubric of ‘joint warfare’ doctrine.

Finally, whilst the Royal Marine Commandos, as a light infantry formation, meshed well into this scheme, they still had to rely on supporting arms from the Army, including armour and artillery, plus air support from the Royal Air Force (and the Royal Navy). This, combined with the fact that the newest amphibious shipping was specifically designed and procured to transport Army heavy equipment and land it during amphibious operations, further reaffirmed that British amphibious concepts, doctrine and practice remained firmly rooted in a joint *expeditionary* approach.

Scope

This topic originated from an initial curiosity in the re-emergence of writings on strategy and doctrine that appeared after the end of the Cold War, particularly in America, that focused on such related issues as “joint operations/warfare”, the operational level of war, warfare in the ‘littoral’, and “expeditionary operations/warfare”.¹⁷ Having first examined these issues within the context of the transition from the Cold War to the post-Cold War era, some fundamental questions emerged. These revolved around the inherent implication that these related issues—which naturally included amphibious warfare—were something revolutionary or even novel, and therefore deserving of special attention.

Regarding the significance of “joint operations/warfare”, one only has to turn to eminent strategist Colin S. Gray, amongst others, for a clear enunciation of its central importance in military history: ‘War is a team enterprise. No matter how fashions in doctrine and military

¹⁷ One of the most outstanding examples of this, at least from an American point of view, is exemplified by the appearance of the periodical *Joint Forces Quarterly* (JFQ), the first issue of which was published in 1992.

organization have evolved, the historical reality has been one of joint, if frequently ill-combined—land-sea or sea-land—effort in the quest for strategic advantage’.¹⁸ In a similarly unambiguous way, Dr. Alfred Vagts, writing in 1952, makes a direct connection among (amphibious) landing operations, warfare in the littoral, and war in general.

Geographically considered, wars may be classified according to the tendency to wage them on land, or on the sea, or on both, as either continental, naval or littoral (from *littus*-shore). Littoral war as here understood is the war fought across the shore lines of the territories of one, or more participants. War is nearly always either littoral, or continental, so much so in fact that probably the majority of sea battles have been fought in sight of land...[T]here can be no war only on the sea, or only in the air. All war is land based and war inherently demonstrates the strongest possible tendency towards landing operations.¹⁹

In view of the above observations and commentary, it is not surprising that much of the aforementioned post-Cold War analysis harkens back to the various Allied amphibious operations of World War II, which remains the historical apex of modern (*i.e.*, twentieth century) joint, littoral and amphibious/expeditionary warfare practice.²⁰ Similarly, it is also no surprise that post-Cold War analyses tend to focus on the few (but significant) amphibious/expeditionary operations that occurred during the post-World War II war era as they appear to be the primary sources of information by which further insight into these fields can readily be acquired.²¹ What is somewhat puzzling, however, is the lack of analysis of the *peacetime* years surrounding these particular post-war operations, particularly when a similar peacetime period such as the inter-war years has been so revealing.²² These peacetime intervals between 1945 and 1968 are exactly what

¹⁸ Gray, Colin S., *The Leverage of Sea Power* (New York, NY/Toronto: The Free Press, 1992), 278.

¹⁹ Vagts, I. See also Beaumont, Roger A., *Joint Military Operations: A Short History*, Contributions in Military Studies, Number 139 (Westport, CT: Greenwood Press, 1993), 1, which cites Vagts’ work amongst his references.

²⁰ See, for example, works by Beaumont, Boose, and Speller/Tuck, amongst others, as discussed below.

²¹ These operations, prior to the Vietnam War, include CHROMITE (Inchon, 1950), MUSKETEER (Suez, 1956), BLUE BAT (Lebanon, 1958), VANTAGE (Kuwait, 1961), POWER PACK (Dominican Republic, 1965), and the planned invasion of Cuba (1962).

²² See, for example, Atwater, William F., ‘United States Army and Navy Development of Joint Landing Operations, 1898-1942’, Ph.D. dissertation, Duke University, 1986; Clifford, Kenneth J., (Col., USMCR), *Amphibious Warfare Development in Britain and America from 1920-1940* (Laurens, NY: Edgewood, Inc., 1983); MacGregor, ‘Innovation’, 1989; Massam, ‘British’, 1995; Millett, Allan R., ‘Assault from the sea: The development of amphibious warfare between the wars – The American, British and Japanese experiences’ in Murray, Williamson, and Allan R. Millett, (eds.), *Military Innovation in the Interwar Period* (Cambridge, MA: Cambridge University Press, 1998; first published 1996), Chapter 2; Millett, Alan R., and Williamson Murray, (eds.), *Military Effectiveness*, Vol. II: *The Interwar Period* (Boston, MA: Allen & Unwin, 1988), Chapters 3, 4, 8; Moy, Timothy D., ‘Hitting the beaches and bombing the cities: Doctrine and technology for two new militaries, 1920-1940’, Ph.D. dissertation, University of California, Berkeley, 1992. See also Bittner, Donald F., ‘Britannia’s Sheathed Sword: The Royal Marines and Amphibious Warfare in the Interwar Years—A Passive Response’, *JMH*, 55 (7/91), 345-364; Clifford, Kenneth J., ‘Anglo-American Interwar Amphibious Doctrine, 1920-1940’ in Reynolds, Clark G., and William J McAndrew (eds.),

this thesis sets out to examine and analyse, which should provide a valuable addition to (and fill a gap in) the existing literature.

Literature Review

Secondary sources that address post-World War II amphibious/expeditionary warfare development can generally be divided into two main categories. The first consists of topical histories related to or involving amphibious/expeditionary warfare and/or operations and includes navy, marine and joint operations/warfare histories. The second category entails works that focus specifically on amphibious/expeditionary warfare development and practice and consists of general historical surveys (part of which cover the early Cold War period) as well as specific post-Second World War analyses.

Navy Histories

For the Royal Navy (RN), most of the established literature exists in the form of popular—and frequently informative—survey histories that describe amphibious/expeditionary warfare generally and certain operations in particular. James Stokesbury, for instance, covers a very broad timeframe but therefore devotes only a single chapter (out of seventeen) to the post-World War II era.²³ Richard Humble uses more than two-thirds of his work to do so,²⁴ but does not examine amphibious matters very specifically. Both Cecil Hampshire²⁵ and Desmond Wettern,²⁶ devote their entire texts to the Cold War and offer a wealth of factual information. Covering the same Cold War timeframe but based predominantly on primary sources is Eric Grove's *Vanguard to Trident*,²⁷ which has for some time been considered as the standard reference for the post-war Royal Navy. Considerable attention is paid to the evolution of

1973 *Seminar in Maritime and Regional Studies* (Orono, ME: University of Maine Press, 1974), 85-93; and MacGregor, David, 'The Use, Misuse, and Non-Use of History: The Royal Navy and the Operational Lessons of the First World War', *JMH*, 56:4 (10/92), 603-615.

²³ Stokesbury, James, *Navy and Empire: A Short History of Four Centuries of British Sea Power and Its Influence Upon Our World* (New York, NY: William Morrow and Co., 1983).

²⁴ Humble, Richard, *The Rise and Fall of the British Navy* (London: Queen Anne Press, 1986).

²⁵ Hampshire, A. Cecil, *The Royal Navy Since 1945: Its Transition to the Nuclear Age* (London: William Kimber & Co., 1975).

²⁶ Wettern, Desmond, *The Decline of British Seapower* (London: Jane's Publishing Co., Ltd., 1982).

²⁷ Grove, Eric J., *Vanguard to Trident: British Naval Policy Since World War II* (Annapolis, MD: US Naval Institute, 1987).

amphibious capabilities as well as to policy-related developments, all of which provides an insightful perspective of the role of amphibious warfare within British post-war defence and naval policy. A slightly narrower assessment of the first decade of the Cold War—and one that covers US naval developments in parallel—is Norman Friedman’s *The Postwar Naval Revolution*,²⁸ which takes more of a thematic approach; an analysis of amphibious forces is deliberately excluded, however, because they ostensibly ‘experienced their most dramatic development later’.²⁹ Finally, mention should be made here of certain older historical assessments by Peter Gretton,³⁰ L. Martin,³¹ Stephen Roskill,³² and B. Schofield³³ which, because they provide varying degrees of insight into the contemporary debate, are treated in this dissertation more so as (published) primary rather than secondary sources. A necessary inclusion in this latter group is William Crowe’s doctoral dissertation, which covers the development of RN policy through 1963.³⁴

A very similar distribution of secondary works exists with regard to the post-war United States Navy (USN), a number of which were published in the early 1990s. Although Stephen Howarth’s survey history³⁵ only has four chapters that cover the 1945-1968 timeframe, more thorough and informative works that address the Cold War exclusively are those by Michael Isenberg,³⁶ Robert Love, Jr.,³⁷ and, most recently, Lisle Rose,³⁸ all of which provide valuable

²⁸ Friedman, Norman, *The Postwar Naval Revolution* (Annapolis, MD: NIP, 1986).

²⁹ Friedman, *Naval Revolution*, 6.

³⁰ Gretton, Peter, *Maritime Strategy: A Study of British Defence Problems* (London: Cassell, 1965).

³¹ Martin, L. W., *The Sea in Modern Strategy*, Studies in International Security: 11 (Washington, DC, & New York, NY: Frederick A. Praeger for ISS, 1967).

³² Roskill, S.W., (Capt., RN, Ret.), *The Strategy of Sea Power: Its Development and Application* (London: Collins, 1962).

³³ Schofield, B. B., (VADM, RN), *British Sea Power: Naval Policy in the Twentieth Century* (London: B. T. Batsford, Ltd., 1967).

³⁴ Crowe, William J., Jr., (Cmdr., USN), ‘The Policy Roots of the Modern Royal Navy, 1946-1963’, Ph.D. dissertation, Princeton University, 1965.

³⁵ Howarth, Stephen, *To Shining Sea: A History of the United States Navy, 1775-1991* (New York: Random House, 1991).

³⁶ Isenberg, Michael T., *Shield of the Republic: The US Navy in an Era of Cold War and Violent Peace, Volume I, 1945-1962 and Volume II, 1962-1992* (New York, NY: St. Martin’s Press, 1993).

³⁷ Love, Robert W., Jr., *History of the US Navy, Volume Two, 1942-1991* (Harrisburg, PA: Stackpole Books, 1992).

³⁸ Rose, Lisle A., *Power at Sea, Volume 3: A Violent Peace, 1946-2006* (Columbia, MS/London: University of Missouri Press, 2006).

contextual background. Probably the best secondary account is that by George Baer³⁹ which, although covering a century's worth of US Navy history, does so by providing constructive strategic context as well as perceptive defence and naval policy analysis, similar to that of Grove's work on the RN. One last source that deserves recognition is another book by Norman Friedman⁴⁰ which, whilst focusing on modern US amphibious shipping design and production, adds to the evolutionary analysis of underlying post-war naval policies. Finally, mention should be made here of an older historical survey of the USN, edited (and co-authored) by E. B. Potter⁴¹ which, as with some British sources mentioned above, is treated here as more of a (published) primary than a secondary source (albeit mainly for definitional purposes).

Marine Histories

Generally speaking, marine histories, whilst addressing a number of *naval* aspects of amphibious/expeditionary operations—like their navy history counter-parts, tend to do so in relative isolation from any evolutionary trend. Beginning with the Royal Marines (RMs), there are three popular survey histories worth noting, a relatively recent work by Richard Brooks,⁴² an older account by James Moulton,⁴³ and an engaging and insightful narrative by Julian Thompson.⁴⁴ The slightly narrower subject of the Royal Marine Commandos is addressed by two other popular but basic works, one by former commando Robin Neillands⁴⁵ and the other by John Parker.⁴⁶ A much more comprehensive and instructive account—not to mention also an

³⁹ Baer, George, *One Hundred Years of Sea Power: The US Navy, 1890-1990* (Stanford, CA: Stanford University Press, 1993).

⁴⁰ Friedman, Norman, *US Amphibious Ships and Craft: An Illustrated Design History* (Annapolis, MD: NIP, 2002).

⁴¹ Potter, E. B. (CMDR, USNR), ed., *The United States and World Sea Power* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1955).

⁴² Brooks, Richard, *The Royal Marines: 1664 to the Present* (London: Constable & Robinson, Ltd., 2002).

⁴³ Moulton, James L. (Maj-Gen, RM, Ret.), *The Royal Marines*, rev. edn. (Eastney: The Royal Marines Museum, 1981; first published by Leo Cooper Ltd., 1972).

⁴⁴ Thompson, Julian [Maj-Gen, RM, Ret.], *The Royal Marines: From Sea Soldiers to A Special Force* (London: Pan Books, 2001).

⁴⁵ Neillands, Robin, *By Sea and Land: The Royal Marines Commandos – A History, 1942-1982* (London: George Weidenfeld & Nicolson, Ltd., 1987).

⁴⁶ Parker, John, *Commandos: The Inside Story of Britain's Most Elite Fighting Force* (London: Headline Book Publishing, 2000).

‘authorised history’—is presented by James Ladd,⁴⁷ who addresses various but limited aspects of amphibious development.

Regarding the United States Marine Corps (USMC), two popular survey histories, an older one by a former director of the Marine Corps History and Museums Division, Brigadier General Edwin H. Simmons,⁴⁸ and an updated and very lengthy one by J. Robert Moskin,⁴⁹ supply some very good background information. By far the highest quality source, however, is Allan R. Millett’s institutional history,⁵⁰ the second edition of which appeared in 1991. Using a considerable amount of primary materials, this book provides some valuable historical context with regard to the role of the US Marines in American military history, particularly their parallel development as ‘colonial infantry’ and an ‘amphibious assault force’ during the pre-World War II period.⁵¹ Two additional works, published in 1962 and 1967, could perhaps be viewed as (published) primary sources. On the one hand is an authoritative and very detailed history by US Marine Colonel Robert D. Heinl, Jr.;⁵² on the other is an institutional ‘snapshot’ by another Marine Colonel, James Donovan,⁵³ which provides an insightful contemporary perspective, including a brief discussion on the role of marines in joint operations.

Joint Operations/Warfare Histories

The last sub-category of related topical histories consists of a few works that address amphibious/expeditionary operations (and/or warfare) through the holistic prism of “joint operations/warfare”. Foremost amongst these is a survey history written by Roger Beaumont,⁵⁴ although only one chapter is devoted to the entire 1943-1991 period. Another more recent—but

⁴⁷ Ladd, James D., *By Sea, By Land: The Royal Marines, 1919-1997*, rev. edn. (London: HarperCollins Publishers, 1998; first edition published in 1980 as *The Royal Marines, 1919-1980*).

⁴⁸ Simmons, Edwin H. (Brig. Gen, USMC, Ret.), *The United States Marines: The First Two Hundred Years, 1775-1975* (New York, NY: Viking Press, 1976; first published 1974).

⁴⁹ Moskin, J. Robert, *The US Marine Corps Story*, 3d Revised Edn. (Boston, MA: Konecky & Konecky and Little Brown and Company, 1992; first published 1977).

⁵⁰ Millett, Allan R., *SEMPER FIDELIS: The History of the United States Marine Corps*, rev. edn., The Macmillan Wars of the United States, Louis Morton, Gen. Ed. (New York, NY: The Free Press, 1991; first published 1980).

⁵¹ See Part Two: ‘Colonial Infantry, 1899-1941’ and Part Three: ‘Amphibious Assault Force, 1900-1945’, respectively.

⁵² Heinl, Robert D., Jr. (Col., USMC), *Soldiers of the Sea: The United States Marine Corps, 1775-1962*, 2nd edn. (Baltimore, MD: The Nautical & Aviation Publishing Company of America, 1991; originally published 1962).

⁵³ Donovan, James A., Jr., (Col., USMC, Ret.), *The United States Marine Corps*, Praeger Library of US Government Departments and Agencies (New York/London: Frederick A. Praeger, 1967).

⁵⁴ Cited above, 14.

not widely disseminated—publication, by Stuart Griffin,⁵⁵ analyses a number of operational case studies, ranging from ‘Gallipoli, 1915-16’ to ‘Sierra Leone, 1999-Present’, although only one (‘Suez, 1956’) falls within the timeframe under examination here. A similar but less analytical work, produced by the US Joint Chiefs of Staff’s Joint History Office,⁵⁶ also has only one case study (*i.e.*, the 1950 landing at Inchon) that falls between 1945 and 1968, with all of the remaining instances (except one) involving operations from 1983 onward. One final and very pertinent study worth mentioning is one by Neville Brown⁵⁷ that will be treated as more of a primary (published) source as it appeared back in 1963. This work examines almost every major post-war amphibious/expeditionary operation performed by both the US and the UK, specifically from the joint perspective of ‘strategic mobility’.

Historical Surveys

The first sub-group of secondary works that focus specifically on amphibious/expeditionary operations consists of general historical surveys that also cover the early Cold War period. Of the more popular works, two are illustrated-type books by Barry Gregory⁵⁸ and co-authors Norman Polmar and Peter Mersky,⁵⁹ while one is a ‘classic’ historical case-study survey by Simon Foster,⁶⁰ although the only relevant operation it covers is the Inchon landing. A similarly limited historical survey is a 1996 study by retired US Marine Colonel Ted Gatchel,⁶¹ although it is unique in that it covers purely defensive aspects of amphibious operations. Two additional sources of varying quality are edited volumes. The older of these, edited by Merrill Bartlett,⁶² is a straightforward collection of previously published articles and

⁵⁵ Griffin, Stuart, *Joint Operations: A Short History* (UK: Training Specialist Services HQ, 2005).

⁵⁶ [OCJCS], *Joint Military Operations Historical Collection* (Washington, DC: Joint History Office, 7/15/97).

⁵⁷ Brown, Neville, *Strategic Mobility*, Studies in International Security: 7 (London: Chatto & Windus for ISS, 1963).

⁵⁸ Gregory, Barry, *Amphibious Operations* (London/New York, NY/Sydney: Blandford Press, 1988).

⁵⁹ Polmar, Norman, and Peter B. Mersky, *Amphibious Warfare: An Illustrated History* (London/New York/Sydney: Blandford Press, 1988).

⁶⁰ Foster, Simon, *Hit the Beach! The Drama of Amphibious Warfare* (London: Cassell PLC, 1998; first published 1995).

⁶¹ Gatchel, Theodore E. (Col., USMC, Ret.), *At the Water’s Edge: Defending Against the Modern Amphibious Assault* (Annapolis, MD: NIP, 1996).

⁶² Bartlett, Merrill L. (Lt. Col., USMC, Ret.) (ed.), *Assault from the Sea: Essays on the History of Amphibious Warfare* (Annapolis, MD: NIP, 1983).

essays. A much more recent work, edited by Tristan Lovering⁶³ as an academic text for British military personnel, is an expansive volume of thoroughly researched (original) essays that provide fresh perspectives on a number of relevant Cold War era operations. One last group of sources consists of contemporary publications. General accounts by John Creswell⁶⁴ and Arch Whitehouse⁶⁵ are straightforward historical surveys, with the latter only barely addressing Cold War operations. Three more focus primarily on the Second World War, with Royal Air Force (RAF) Vice Marshal E. J. Kingston McCloughry⁶⁶ addressing certain command issues, and Bernard Fergusson⁶⁷ and L. E. H. Maund⁶⁸ (two central Second World War actors) providing detailed and insightful accounts of the Combined Operations organisation's performance during the war (and somewhat thereafter).

Amphibious/Expeditionary Analyses (post-World War II)

The second sub-group of specifically amphibious/expeditionary-focused works consists of those that expressly examine the post-war development of amphibious/expeditionary warfare in the UK and the US, or both. Until very recently, there were only a few that covered developments by the US Naval Service (*i.e.*, mostly the Marine Corps) exclusively. Whilst published in the 1970s and therefore perhaps a bit outdated, these works were extremely valuable because of their foundation on 'official' (primary) US Marine Corps and Navy documentation, some of which was difficult to locate and re-examine. Foremost amongst these is Kenneth Clifford's monograph *Progress and Purpose: A Developmental History of the United States Marine Corps, 1900-1970*,⁶⁹ which describes the decade-by-decade development of the Marine Corps in the modern era and which focuses heavily various naval aspects of amphibious

⁶³ Lovering, Tristan T. A., (Lt. Cdr., RN), (ed.), *Amphibious Assault: Manoeuvre from the Sea – Amphibious Operations from the Last Century* [London: Ministry of Defence, 2005].

⁶⁴ Creswell, John (Capt., RN), *Generals and Admirals: The Story of Amphibious Command* (London: Longmans, Green & Co., 1952)

⁶⁵ Whitehouse, Arch, *Amphibious Operations* (London: Frederick Muller Ltd., 1963).

⁶⁶ Kingston McCloughry, E. J., (Vice-Marshal, RAF), *The Direction of War: A Critique of the Political Direction and High Command in War* (New York, NY: Frederick A. Praeger, Inc., 1955).

⁶⁷ Fergusson, Bernard, *The Watery Maze: The Story of Combined Operations* (New York: Holt, Rinehart & Winston, 1961).

⁶⁸ Maund, L. E. H. (RAdm., RN, Ret.), *Assault from the Sea* (London: Methuen & Co., Ltd., 1949).

⁶⁹ Clifford, Kenneth J. (Lt. Col., USMCR), *Progress and Purpose: A Developmental History of the United States Marine Corps 1900-1970* (Washington, DC: H&MD, HQ, USMC, 1973).

operations. This work is complemented by a similarly-researched two-volume *Marines and Helicopter* series, which covers the 1945-1962 and 1962-1973 periods, respectively.⁷⁰ Due to the fact that the Marine Corps' amphibious development revolved around the helicopter, these accounts expand upon and deepen the core analysis provided by Clifford. Whilst all of these volumes are based chiefly on primary source evidence (and are therefore featured prominently when analysing American *naval* developments), the one drawback central to all three—at least with regard to examining American development *as a whole*—is that they tend to marginalise, if not ignore, the contributions of the other services. Having said that, the December 2008 release of Donald Boose's monograph, *Over the Beach: US Army Amphibious Operations in the Korean War*,⁷¹ represents a significant balance to an otherwise naval service-dominated field of research and analysis. Whilst extremely detailed and therefore quite illuminating it focuses almost exclusively on Korean War operations and does not address US Air Force (USAF) developments in any detail. On that note, the only secondary source relating to the Air Force's development of amphibious/expeditionary warfare is an extremely detailed but broad historical survey on 'basic thinking' in the USAF by Robert Futrell,⁷² which includes some valuable information on the evolution of joint and air force amphibious doctrine, not to mention also joint doctrine in general.

High-quality, secondary works that examine British amphibious/expeditionary warfare development specifically during the first two decades of the Cold War have been confined—for all intents and purposes—to a single author, Ian Speller. His work on the subject spans nearly fifteen years and has arguably gone through three evolutionary phases over time. The first phase is represented primarily by his 2001 book, *The Role of Amphibious Warfare in British Defence Policy, 1945-1956*,⁷³ which is based on the first half of his 1996 Ph.D. dissertation.⁷⁴ In it, Dr.

⁷⁰ Rawlins, Eugene W., (Lt. Col., USMC), and William J. Sambito, (Maj., USMC), *Marines and Helicopters, 1946-1962* (Washington, DC: H&MD, HQ, USMC, 1976); Fails, William R., (Lt. Col., USMC), *Marines and Helicopters, 1962-1973* (Washington, DC: H&MD, HQ, USMC, 1978).

⁷¹ Boose, Donald W., Jr., (Col., USA, Ret.), *Over the Beach: US Army Amphibious Operations in the Korean War* (Ft. Leavenworth, KS: CSI Press, 12/08).

⁷² Futrell, Robert F., *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, 2 Vols. [1907-1984], 2nd edn. (Maxwell AFB, AL: AUP, 12/89; first published 1971).

⁷³ Speller, Ian, *The Role of Amphibious Warfare in British Defence Policy, 1945-1956* (Basingstoke/New York, NY: Palgrave, 2001). A condensed but more nuanced assessment is provided in chapter form as 'The Role of Amphibious

Speller concludes that British development underwent a fundamental transformation from being an inter-service responsibility to a single-service one which, in turn, reflected the US arrangement at the time.⁷⁵ Speller's second phase of analysis consists mainly of a few chapters in edited books which, whilst re-affirming his initial conclusions in one case,⁷⁶ increasingly outline the joint aspects of British development as they evolved during the post-1956 era,⁷⁷ many of which had been introduced in the author's dissertation.⁷⁸ By the time of Speller's latest work, which encompasses two articles written in 2006 and 2008,⁷⁹ respectively, mention of the initial works' conclusions is conspicuously de-emphasised, if not absent altogether. There is, however, an increasing concentration on the joint aspects of amphibious operations, most notably in the field of doctrine—which was largely missing in his 2001 book⁸⁰—not to mention also on the concept of 'expeditionary warfare' (although this is not specifically defined). It is with most of these latter observations that this thesis is in agreement and, as such, will attempt to synthesise them into a comprehensive (but slightly revised) representation of the British approach toward—and practice of—amphibious/expeditionary warfare between 1945 and 1968.

Only three secondary sources have attempted to compare and contrast American and British developments explicitly as part of a wider examination to assess the evolution of post-war amphibious/expeditionary warfare. The first of these is a relatively recent popular work by the aforementioned Ian Speller and Christopher Tuck, titled *Amphibious Warfare: The Theory and*

Warfare in British Defence Policy, 1945-2000' in Till, Geoffrey, (ed.), *SEAPOWER at the Millenium* (Phoenix Mill/Thrupp/Stroud: Sutton Publishing Ltd., 2001), 84-94.

⁷⁴ Speller, Ian A., 'The Role of Amphibious Warfare in British Defence Policy, 1945-64', Ph.D. dissertation, King's College London, London, 1996.

⁷⁵ See, *Role*, Chapter 3, especially 98; 'Role', Chapter 3.

⁷⁶ Speller, Ian, 'Amphibious operations 1945-1998' in Harding, Richard (ed.), *The Royal Navy, 1930-2000: Innovation and Defence* (London/New York, NY: Frank Cass, 2005), 213-245.

⁷⁷ See 'The Royal Navy, expeditionary operations and the End of Empire, 1956-75' in Kennedy, Greg, (ed.), *British Naval Strategy East of Suez 1900-2000: Influences and Actions* (London/New York, NY: Frank Cass, 2005), 178-198, which originated as 'Amphibious Renaissance: The Royal Navy and the Royal Marines, 1956-66', *IJNH*, 1:1 (4/02), online at www.ijnhonline.org/archives.html.

⁷⁸ Speller, 'Role', Chapters 6-8.

⁷⁹ See 'The Seaborne/Airborne Concept: Littoral Manoeuvre in the 1960s?', *JSS*, 29:1 (2.06), 53-82; and 'Corbett, Liddell Hart and the "British Way in Warfare" in the 1960s', *DS*, 8:2 (6.08), 227-239.

⁸⁰ For this observation, see a book review by J. Sills O'Keefe in *JMH*, 67:1 (1/03), 292-293.

Practice of Amphibious Operations in the 20th Century,⁸¹ which presents a well-balanced and succinct overview of modern advances using twentieth century ‘case studies’, although only two (out of a total of fifteen) comprise operations between 1945 and 1968. A more detailed work is *Sea Soldiers in the Cold War: Amphibious Warfare, 1945-1991*, which is co-authored by two retired USMC officers, Joseph Alexander and Merrill Bartlett.⁸² While claiming to be ‘an operational history of amphibious warfare in the Cold War, principally as defined by the two superpowers, their allies, and surrogates’, only two of a total of 61 pages of text dealing with the post-war period through the Vietnam conflict addresses British developments and practice. This appears to result from a presumption that the British Royal Marines evolved into an amphibious assault formation just like their American counterparts, the US Marines. Furthermore, and perhaps due to their backgrounds, the authors tend to marginalise the contributions of other services with regard to amphibious/expeditionary warfare development. Indeed, this standpoint seems to be exemplified by the authors’ interpretation of an oft-quoted statement by US Army General (and first Chairman of the Joint Chiefs of Staff) Omar Bradley when, in 1949, he appeared to (mistakenly) proclaim the obsolescence of large-scale amphibious operations due to the advent of the atomic bomb, almost exactly one year prior to the famous amphibious landing at Inchon.⁸³ What is not mentioned, however, not only by these particular co-authors but also by a few others who bring up Bradley’s statement, is that US Marine Corps Brigadier General Roy S. Geiger, in almost identical language, made the same pronouncement three years beforehand.⁸⁴

⁸¹ Speller, Ian and Christopher Tuck, *Amphibious Warfare: The Theory and Practice of Amphibious Operations in the 20th Century*, Strategy and Tactics series (St. Paul, MN: MBI Publishing Co., 2001).

⁸² Alexander, Joseph H., (Col., USMC, Ret.), and Bartlett, Merrill L., (Lt. Col., USMC, Ret.), *Sea Soldiers in the Cold War: Amphibious Warfare 1945-1991* (Annapolis, MD: NIP, 1995).

⁸³ Alexander/Bartlett, 1.

⁸⁴ See, for example, Heinl, *Soldiers*, 530, 536; Heinl, *Victory at High Tide: The Inchon-Seoul Campaign* (Philadelphia, PA/New York, NY: J. B. Lippincott Co., 1968), 3; Isenberg, *Shield*, Vol. I, 1945-1962, 157; Krulak, Victor H., (Lt. Gen., USMC, Ret.), *First to Fight: An Inside View of the US Marine Corps* (Annapolis, MD: NIP, 1984), 71; Love, Volume II, 1942-1991, 335; and Simmons, *Marines*, 180. Both Heinl (*Soldiers*) and Simmons are doubly misleading as they cite Geiger’s quote but leave out the specific language that mirrors Bradley’s. For an example of an accurate quotation of Geiger, see Till, Geoffrey, (with others), *Maritime Strategy and the Nuclear Age*, 2nd ed. (New York, NY: St. Martin’s Press, 1984; first published 1982), 199. For an interpretation of the true meaning of Bradley’s statement (in an endnote), see Baer, 507-508, who also mentions Geiger’s quote in a separate endnote (and cites Till for it), 507.

The last—and probably most significant—source is Michael Evans' *Amphibious Operations: The Projection of Sea Power Ashore*⁸⁵ which, while only partially devoted to the early Cold War era, nevertheless identifies a few central themes that will be expanded upon in this thesis. One of them, which is specifically introduced in the 'Foreword' by Major-General Julian Thompson, RM, centres on debunking the popular myth that 'amphibious operations are the exclusive preserve of the Royal Marines, or indeed any other marines'.⁸⁶ As will be seen, this attitude reflects a distinctively British approach toward amphibious/expeditionary warfare (*i.e.*, 'combined operations') that is traditionally joint in nature. Although the text itself claims to be 'essentially a British view', it outlines and examines a number of significant differences between British and American conceptions and practice that originated during the inter-war and World War II years and evolved afterwards. On the one hand, this involved recognising the central importance of such aspects as 'Strategy', 'Doctrine' and 'Organisation, Training and Equipment' in the American formulation of amphibious forces and doctrine during the inter-war years as well as the significance of the 'Combined Operations Headquarters (COHQ)' establishment and the 'Warfare is Joint' axiom in the British development and practice of 'combined operations' before and during the Second World War.⁸⁷ On the other hand, it entailed ascertaining British and American definitions of 'amphibious operations'. Although general similarities (as well as a few minor variances) are quite apparent, the author isolates and emphasises the source of a fundamental divergence, already mentioned above.

The main difference...concerns this focus of an amphibious operation, the assault, which is at once the culmination of the maritime phase and the start of the land campaign. *Although most amphibious forces use the term assault to describe the landing, it has degrees of emphasis in interpretation which are central to an understanding of the conduct of this form of warfare.*⁸⁸

Whilst the author then points out that the degree of opposition on the beach is an important element, he unfortunately does not follow up on his observations by providing a comprehensive

⁸⁵ Evans, Michael H. H., (Col., RM), *Amphibious Operations: The Projection of Sea Power Ashore*, Brassey's Sea Power: Naval Vessels, Weapons Systems and Technology Series, Volume 4 (London: Brassey's, 1990).

⁸⁶ Evans, xix. See also Thompson, Julian, (Maj-Gen., RM), 'The Royal Marines and Amphibious Operations in the Twentieth Century', *RUSIJ*, 145:4 (8.00), 15.

⁸⁷ Evans, 22-28.

⁸⁸ Evans, 10. Emphasis added.

account of the most distinctively significant features between American and British approaches (not to mention also *intra*-national differences) and how they evolved over the course of the early Cold War period. It is this missing assessment that this dissertation aims to provide.

STRUCTURE, SCOPE AND METHODOLOGY

Structure

In covering the 1945-1968 period, this dissertation builds on the structural framework of what has become a standard reference work for the pre-1945 era. Written by the aforementioned Kenneth Clifford (and based upon his master's thesis), *Amphibious Warfare Development in Britain and America, 1920-1940*⁸⁹ uses a chronological narrative to examine the 'parallel courses' of British and American development of amphibious/expeditionary warfare during sequential phases of the inter-war period and stretching into the World War II.⁹⁰

This thesis follows a similarly-organised chronological structure, but beginning in 1945. The main body is divided into three sequential 'Parts', covering the 1945-1950, 1950-1957, and 1957-1968 periods, respectively, which represent distinct phases in the evolution of American and British development. Each 'Part' consists of two chapters—one for each subject country—plus an opening comparative summary. Each chapter, in turn, details and assesses the varying courses of development *within* each country.

The chapters are further divided into three main sections—which represent the strategic, organisational/institutional, and tactical/operational levels of analysis—in order to simplify the overall comparative analysis. Along these lines, it should be pointed out that the organisation of the tactical/operational sub-sections are specifically arranged to reflect the divergent (but parallel) courses of internal debate taking place *within* America and Britain, respectively. To that end, American development is assessed by addressing 'naval' advances on the one hand, and 'joint' developments—which include the individual contributions of the Army and Air Force—

⁸⁹ See footnote 22.

⁹⁰ The phrase 'parallel courses' is borrowed from the title of Clifford's master's thesis, 'On Parallel Courses: An Analysis of British and American Amphibious (Combined) Operations, 1920-40', M.Phil. dissertation, King's College London, 1980. See also Clifford, 'Anglo-American', 85-93.

on the other. British development is generally examined through the ‘joint’ lens (*i.e.*, that of traditional ‘combined operations’), whilst taking into account the increasing role of the Royal Marines (commandos), but deliberately within the broader context of joint/combined operations (or ‘expeditionary warfare’).

Methodology

Whilst this thesis uses the same chronological (and comparative) framework as employed in Clifford’s book, it departs from what appears to be that author’s central premise: that the so-called ‘parallel courses’ of ‘amphibious (combined) operations’ development in the US and the UK were more similar than different. This deduction is epitomised by one of Clifford’s chief conclusions, that ‘quite apart from one another, Britain and America, for different reasons, each developed an amphibious doctrine that fundamentally was identical to the other’.⁹¹ Not only was this not the case for the period before (and during) World War II—as American ‘landing operations’ doctrine was fundamentally *naval* in character whilst British ‘combined operations’ doctrine was fundamentally *joint*—but it is also not the case for the first two decades of the post-war era for the exact same reason (amongst others), as will be seen in the body of this thesis.

Along these lines, this dissertation will address two other thematic deficiencies that have been identified in analyses of the inter-war (and World War II) era, which could logically be applied to the immediate post-war era. The first is revealed in Clifford’s book and concerns the treatment of amphibious/expeditionary warfare development in America where, as that author claims, ‘the development of amphibious doctrine was not an inter-service effort.... *The Army and the Army Air Force did not contribute anything to development* primarily because it was the task of the Navy/Marine Corps acting as a single Service’.⁹² Whilst this assertion has been proven inaccurate for the pre-1945 period,⁹³ the same could not be said for the post-war era, as

⁹¹ Clifford, *Amphibious*, 250. See also vii for an almost matching statement.

⁹² Clifford, *Amphibious*, 249. Emphasis added.

⁹³ See Atwater, ‘Development’. See also Thornton, Gary J. E., (Cmdr., USN), ‘The US Coast Guard and Army Amphibious Development’, Military Studies Program paper, USAWC, Carlisle Barracks, PA, 3/23/87.

exemplified by the limited (if any) attention given to the US Army and Air Force in the secondary sources discussed above, including most of the naval and marine histories but especially the monographs by Clifford, Rawlins/Sambito and Fails, as well as the two works by Alexander/Bartlett and Evans. As also mentioned above, it was not until very recently that this shortcoming was largely offset by Boose's publication, although this analysis is confined mostly to the Korean War and almost exclusively to US Army developments.

A second thematic deficiency that arguably transcends from the inter-war period can be identified from an analysis of pre-1941 British amphibious development by David Massam.⁹⁴ Noting that there had been a general 'failure to put the British achievement in context' during the inter-war years, Massam specifically blamed 'an *over-emphasis on locating parallels with the United States Marine Corps*, which misconception leads to an inaccurate picture of British approach and capability'.⁹⁵ Although it is similarly tempting to draw such correlations between the American and British corps of marines during the early Cold War period,⁹⁶ particularly as the latter had successfully monopolised the amphibious 'commando' role by 1947, such an approach can over-simplify what is a much more complex association between the USMC's *Fleet Marine Force* (FMF) and the Royal Marines *Commandos*. Whilst similar in a number of obvious respects, the two formations are arguably more notable for a few central amphibious/expeditionary differences (than their overall similarities). The most obvious—albeit perhaps a bit technical—of these, is the fact that the FMF was inherently a fully-integrated "combined arms" formation complete with its own infantry, armour, (light) artillery, combat engineers, and even air support. The Commandos, on the other hand, consisted predominantly of light infantry and therefore had to have supporting arms attached as needed, using mostly Army elements. Another more subtle, yet not insignificant, difference concerned the roles and functions

⁹⁴ Cited above, 14.

⁹⁵ Massam, 'British', 1, 11; also 245.

⁹⁶ See, for example, Alexander/Bartlett.

of the Commandos which, as has been argued elsewhere,⁹⁷ were more akin to specially-trained forces performing amphibious tasks (like their descendant counterparts, the US Army Rangers, in World War II⁹⁸) rather than amphibiously-trained forces performing special tasks. Indeed, if there is a more apt comparison to be made between the Royal Marines and the US Marines, one could suggest that the post-war Commandos operated more so as the US Marines did as (expeditionary) ‘colonial infantry’ between 1899 and 1941 instead of as a specialised ‘amphibious assault force’ between 1900 and 1945.⁹⁹

TERMS AND DEFINITIONS

The current state of affairs with regard to defining the various terms associated with amphibious/expeditionary warfare has experienced a period of increasing ambiguity and confusion. This is because of the ‘widespread’, ‘inconsistent’ and often inter-changeable use of a number of similarly defined terms, including: ‘amphibious operations/warfare’, ‘combined operations’, ‘joint operations/warfare’, ‘expeditionary operations/warfare’, etc.¹⁰⁰ Indeed, a very recent work has gone so far as to assert that ‘amphibious warfare is not undefined—it is defined badly’. Unfortunately, this same work—at the beginning of an otherwise very laudable effort to offer an extensive definitional discussion on the subject—goes on to conflate the terms ‘amphibious (or “combined” or “joint”)', and also introduces such an awkward phrase as ‘grand strategic amphibious warfare’.¹⁰¹ Similarly, a different work has argued that a definitional source of ‘expeditionary operations’ stems from the so-called ‘small wars’ that were fought by both the

⁹⁷ Hargreaves, Andrew L., ‘An analysis of the rise, use, evolution, and value of Anglo-American commando and special forces formations, 1939-1945’, Ph.D. dissertation, King’s College London, 8.08. See also Steers, Howard J. T. (Capt., USAR), ‘Raiding the Continent: The Origins of the British Special Service Forces’, MMAS thesis, USAC&GSC, 6/6/80.

⁹⁸ See Haggerty, Jerome J., ‘A History of the Ranger Battalions in World War II’, Ph.D. dissertation, Fordham University, 1982; and, to a lesser extent, Hogan, David Wentweh, Jr., ‘The Evolution of the Concept of the US Army’s Rangers, 1942-1983’, Ph.D. dissertation, Duke University, 1986.

⁹⁹ See Literature Review for reference to Allan Millett’s *SEMPER FIDELIS*, which is organised into four distinct historical phases, including ‘Colonial Infantry, 1899-1941’, and ‘Amphibious Assault Force, 1900-1945’.

¹⁰⁰ Till, Geoffrey, ‘Amphibious Operations and the British’ in Till, Geoffrey, Theo Farrell, and Mark J. Grove, *Amphibious Operations*, The Occasional, Number 31 (Camberly: SCSI, 11.97), 11. See also Galdorisi, George V., ‘Expeditionary and Amphibious Warfare’ in Sam J. Tangredi, (ed.), *Globalization and Maritime Power* (Washington, DC: NDU Press, 2002), 408.

¹⁰¹ See Trim, D. J. B., and Mark C. Fissel, ‘Amphibious Warfare, 1000-1700: Concepts and Contexts’ in D. J. B. Trim and Mark C. Fissel, (eds.), *AMPHIBIOUS WARFARE 1000-1700: Commerce, State Formation and European Expansion* (Leiden/Boston, MA: Brill, 2006), Chapter One, especially 1, 29-31.

British in the nineteenth century and the Americans in the twentieth.¹⁰² Finally, it has not helped that current US Marine Corps doctrine has apparently just substituted the term ‘expeditionary’ for ‘amphibious’ in an apparent conceptual effort to revert back to a period when the Marines were employed as colonial infantry instead of amphibious assault specialists.¹⁰³

General Terms: “Amphibious” vs. “Expeditionary”

Despite this situation, an attempt must still be made here to outline a few working definitions relevant to this subject matter, if only to provide some sort of terminological basis for comparing (and contrasting) the ‘parallel courses’ of American and British development. This can be done by using recent doctrinal publications and analyses as many of the central and distinguishing features of amphibious/expeditionary operations are enduring and can therefore be easily identified.

As already indicated, the basis of this thesis revolves around the ultimate relationship between *amphibious* and *expeditionary*. Beginning with the latter, which is the broader and more all-encompassing term, current US doctrine defines an ‘expedition’ simply as a ‘military operation conducted by an armed force to accomplish a specific objective in a foreign country’.¹⁰⁴ The most difficult (and therefore complicated) of these involve situations where an expedition is launched into a hostile or potentially hostile setting, in which case a so-called ‘forcible entry operation’ must be used, which is defined as:

a joint military operation conducted against armed opposition to gain entry into the territory of an adversary by seizing a lodgment as rapidly as possible.... A lodgment is a designated area in a hostile or potentially hostile territory that, when seized and held, makes the continuous landing of troops and materiel possible and provides maneuver space for subsequent operations (a lodgment may be an airhead, a beachhead, or a combination thereof).¹⁰⁵

¹⁰² Till, Geoffrey, *Seapower: A Guide for the Twenty-First Century*, Cass Series: Naval Policy and History, Number 23 (London: Frank Cass, 2004), Chapter Eight, especially 235-238.

¹⁰³ See CMC, MCDP 3, *Expeditionary Operations* (Washington, DC: DN, HQ, USMC, 4/16/98), especially 1—2 – 1—4; see also Farrell, Theo, ‘United States Marine Corps Operations in Somalia: A Model for the Future’ in Till/Farrell/Grove, 43-56.

¹⁰⁴ CJCS, JP 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: OJCS, 4/12/01; amended through 4/10), 169.

¹⁰⁵ CJCS, JP 3-18, *Joint Forcible Entry Operations* (Washington, DC: OJCS, 6/16/08).

As this definition implies, there are two elemental means by which such forcible entries can be conducted: by air and/or by sea. Accordingly, three ‘primary forcible entry operations’ are available to convey ‘expeditions’ into foreign settings under hostile or potentially hostile conditions: (1) the amphibious assault, (2) the airborne (*i.e.*, parachute) assault, and (3) the air (*i.e.*, fixed- and/or rotary-wing aircraft) assault.¹⁰⁶ These endeavours can be said to fall into the realm of “expeditionary warfare” and, when employed—either separately or in any combination—to enable ‘subsequent operations’ ashore (*i.e.*, campaigns), are usually conducted at the operational level of war.

As the term “amphibious” stems from the Latin word *amphibius* and the Greek word *amphíbios*, which both connote ‘living a double life’, a generic definition can be recounted as follows: ‘living or able to live both on land and in water; belonging to both land and water’.¹⁰⁷ Due to this conceptual proximity to a water- or coast-line, when applied to military operations, the term “amphibious” can be said to concentrate—or culminate—at the tactical level of war.

Consequently, and again using current US doctrine, an ‘amphibious operation’ can be defined as a ‘military operation launched from the sea by an amphibious force (AF), embarked in ships or craft with the primary purpose of introducing a landing force ashore to accomplish the assigned mission’.¹⁰⁸ The ‘AF’ is further defined as an ‘amphibious task force (ATF) and a landing force (LF) together with other forces that are trained, organized, and equipped for amphibious operations’, with the former ‘task force’ consisting of a ‘Navy task organization’ and the latter ‘landing force’ consisting of a ‘Marine Corps or Army task organization’, respectively.¹⁰⁹

¹⁰⁶ CJCS, JP 3-18 (2008), I-1, I-6 – I-7 (and ix).

¹⁰⁷ Stein, Jess, (ed.), *The Random House Dictionary of the English Language*, Unabridged Edn. (New York, NY: Random House, 1966/7), 50.

¹⁰⁸ CJCS, JP 3-02, *Amphibious Operations* (Washington, DC: OJCS, 8/10/09), I-1 (and xi). See also CJCS, JP 1-02, (4/12/01), 29; and CJCS, JP 3-02.1, *Joint Doctrine for Landing Force Operations*, 11/1/89. xx. An almost verbatim British definition can be found in Ministry of Defence (MOD), BR 1806, *British Maritime Doctrine*, 3rd edn. (London: The Stationery Office, 2004), 238, which, in turn, is taken from AAP-6, *NATO Glossary of Terms and Definitions* (2003).

¹⁰⁹ CJCS, JP 3-02 (2009), I-2 (and xi).

Generally speaking, amphibious operations consist of a number of phases, including ‘planning’, ‘embarkation’, ‘rehearsal’, ‘movement’, and ‘action’, with the last phase being further divided into the five possible types of operation.¹¹⁰ These consist of the ‘Assault’, ‘Raid’, ‘Demonstration’, ‘Withdrawal’, and ‘Support to Other Operations’.¹¹¹ Of the three most relevant types of operation for this thesis—the assault, raid, and withdrawal—by far the most significant is the first, which is at once the most complex and difficult. To wit, ‘[t]he salient requirement of an amphibious assault is the necessity for swift, uninterrupted buildup of sufficient combat power ashore from an initial zero capability to full coordinated striking power as the attack progresses toward AF objectives’.¹¹² It is this specific characteristic—essentially a tactical ‘culminating point’—that has made amphibious assaults amongst the most complicated of all martial endeavours. Consequently, they require and deserve the most concerted attention.

To that end, and in order to underscore the tactical aspects of these enterprises, it is worthwhile to formulate briefly a more comprehensive definition. This can be accomplished by slightly editing and modernising certain definitions that originated during the inter-war years when modern landing operations were first being conceptualised and codified into doctrine. As such, the following can be offered as a more accurate and comprehensive definition:

An amphibious or landing operation is, in effect, a co-ordinated assault from the sea by integrated naval and military forces (possibly including airborne forces) using assault ships, craft and possibly (fixed- and/or rotary-wing) aircraft against organised or unorganised opposition, modified by initially substituting ships’ gunfire for that of the landing forces’ organic fire support (i.e. artillery and tanks), and frequently, carrier-based aviation for land-based air units until the latter can be operated from shore.¹¹³

One final definitional observation can be made from current doctrine as it reveals an underlying dichotomy of amphibious assaults that has endured since the inter-war years and came into stark contrast—at least in the United States—during the immediate post-war decades.

¹¹⁰ See CJCS, JP 3-02 (2009), Chapter I (especially I-5 – I-6), and Chapter III (especially III-1). See JP 3-02.1, xx, for use of term ‘Assault’ instead of ‘Action’ to delineate the final phase.

¹¹¹ CJCS, JP 3-02 (2009), I-2 – I-3, III-59 – III-72.

¹¹² CJCS, JP 3-02 (2009), I-2.

¹¹³ This definition is paraphrased from the US Marine Corps’ 1934 *Tentative Manual for Landing Operations* (also known as *Manual for Naval Overseas Operations*), para. 1-34 (page 12).

This involves the two most important ‘applications’ or purposes for which amphibious operations are conducted, namely to:

- (1) *Achieve operation or campaign objectives in one swift stroke* by capitalizing on surprise and simultaneous execution of supporting operations to strike directly at enemy critical vulnerabilities and decisive points in order to defeat strategic or operational centers of gravity (COGs).
- (2) *Comprise the initial phase of a campaign or major operation* where the objective is to establish a military lodgment to support subsequent phases.¹¹⁴

As will be seen, the subtle but significant difference between these two descriptions is a direct reflection of the fundamental variances that existed after the Second World War, not only between America and Britain in general but also, and more considerably, between the US Naval Service and the US Army (and, later, the US Air Force).

Other Definitions

As mentioned above, the parallel but different courses of American and British development that evolved during the first decades of the Cold War were respectively based on a few key parallel but different features across the spectrum of analysis. These included “naval” vs. “maritime” at the strategic level, “single service” vs. “inter-service” at the organisational level, and “combined arms” vs. “joint warfare” at the tactical/operational level. In order to help describe and assess the overall dichotomy between American and British developments, it is necessary to provide a brief explanation of each of these pairs of terms below.

Strategic Level: “Naval” vs. “Maritime”

As also mentioned previously, the terms “naval” and “maritime”—when applied to the strategic level—have theoretical bases. Common to both is the definition of ‘strategy’, which the famous war theoretician Baron de Jomini stated as being simply, ‘the art of properly directing masses upon the theater of war, either for defense or for invasion’.¹¹⁵ The understanding of the term ‘naval strategy’, in turn, at least from an American perspective, stems from the writings of

¹¹⁴ CJCS, JP 3-02 (2009), I-1 (and xi). The three remaining applications included: ‘(3) Serve as a supporting operation in a campaign.... (4) Outflank an enemy. (5) Support military engagement, security cooperation, deterrence, and humanitarian and civic assistance’ (I-1 – I-2). See also CJCS, JP 3-02 (2001), I-2 (and x). Emphasis added.

¹¹⁵ de Jomini, Baron [Antoine H.], (Capt. G.H. Mendell, USA, and Capt. W.P. Craighill, USA, translators), *The Art of War*, new edn. reprint (Westport, CT: Greenwood Press, [1987]; first published in US in 1862; first published 1838), 11.

US Navy Captain Alfred T. Mahan, who famously conceptualised the idea of ‘Sea Power’.¹¹⁶ ““Naval strategy””, he said (quoting a French author), ““has indeed for its end to found, support, and increase, as well in peace as in war, the sea power of a country;”...’.¹¹⁷ In other words, the focus of this strategy was almost exclusively naval in character.

Contrasting this is ‘maritime strategy’, a definition of which can be taken from Sir Julian Corbett. ‘By maritime strategy’ he stated, ‘we mean the principles which govern a war in which the sea is a substantial factor.... The paramount concern of maritime strategy, then, is to determine the mutual relations of your army and navy in a plan of war’.¹¹⁸ Indeed, writing again a few years later, Corbett expounded on his definition by assessing the relationship between “naval” and “maritime” strategies, which would remain particularly relevant with regard to amphibious/expeditionary developments.

Thus naval strategy, so long as it merely contemplates bringing the enemy’s fleet to successful action and securing the command of the sea, may often miss its most potent line of energy, and operating as it were single-handed, it may fail to achieve a point in the war which combined or co-ordinated action would have given it.... Hence the importance of approaching the study of maritime warfare not from the point of view of what is usually understood by naval strategy, but from the wider standpoint of the functions of the fleet.¹¹⁹

As will be seen, it is exactly this difference in perspective that characterised the overall variance between American and British approaches to amphibious/expeditionary warfare.

Organisational/Institutional Level: “Single Service” vs. “Inter-service”

Following on from the variances in strategic terminology outlined above are those that exist at the organisational/institutional level of analysis: “single service” vs. “inter-service” (*i.e.*, ‘joint’/‘combined’). The former, when related to naval strategy, simply refers to the US Navy and US Marine Corps—not to mention also the RN and RM—as being a part of a single Naval Service. As will be seen, although the USMC was technically a separate (fourth) service, it was

¹¹⁶ Mahan, Alfred T., (Capt., USN), *The Influence of Sea Power Upon History, 1660-1783*, 14th edn. (Boston, MA: Little, Brown, and Co., 1898; first published 1890).

¹¹⁷ Mahan, *Influence*, 23.

¹¹⁸ Corbett, Julian S., *Some Principles of Maritime Strategy*, Classics of Sea Power, John B. Hattendorf and Wayne P. Hughes, Jr., series editors, (Annapolis, MD: NIP, 1988; first published 1911), 15-16.

¹¹⁹ Corbett, Julian S., *The Seven Years War: A Study in British Combined Strategy* (London: The Folio Society, 2001; first published 1907 as *England in the Seven Years’ War*), 5.

treated—both practically and literally, in certain key doctrinal publications—as part of the *naval* establishment, a perception that was only reinforced by the fact that the Marine Corps was an administrative entity within the Department of the Navy (DN).

Opposing this is the confusion stemming from the frequent inter-changeability of the terms “inter-service”, “joint service” and “combined [service] operation”. Whilst the former two are synonymous and refer simply to more than one service (of one country), the latter is a British expression that was officially used—as early as 1911—to describe *all* forms of joint operations conducted by the army, navy and (later the) air force.¹²⁰ In effect, the words ‘combined’ and ‘joint’ were considered to be synonymous—and sometimes are still treated as such today—although in today’s terminology ‘combined’ refers to more than one ally.¹²¹ Overall, whilst often seen to be simply a difference in semantics, it will be seen that this variance is actually quite fundamental when relating to amphibious/expeditionary warfare.

Tactical/Operational Level: “Combined Arms” vs. “Joint Warfare”

The last pair of terms that require some description are at the tactical/operational level of analysis, although they are closely related to—if not overlap—the variances at the organisational/institutional level discussed above. In today’s military lexicon, “combined arms” can be derived from the current definition of ‘combined arms team’, which means ‘[t]he full integration and application of two or more arms or elements of one Military Service into an operation’.¹²² Probably the most significant practitioner of this manner of combat is the US Marine Corps, simply because—alone amongst all of the military branches (American as well as British), particularly during the immediate post-war period—the Corps’ Fleet Marine Force (FMF) had all of the required elements that comprised an inherent “combined arms” formation,

¹²⁰ See, for example, the 1911 and 1913 editions of the *Manual of Combined Naval and Military Operations* (WO 33/569, WO 33/644; NA), followed by the 1925 edition of the *Manual of Combined Naval, Military and Air Operations* (AIR 10/1206; NA), and the 1931 and 1938 editions of the *Manual of Combined Operations* (DEFE 2/708, DEFE 2/709; NA).

¹²¹ See CJCS, JP 1-02 (2001), 86, for the definition of ‘combined operation’: ‘An operation conducted by forces of two or more Allied nations acting together for the accomplishment of a single mission’.

¹²² CJCS, JP 1-02, 100.

including ‘at least infantry..., armor, reconnaissance..., artillery, antitank weapons, air defense or antiaircraft forces, combat engineers..., attack helicopters, and ground-attack aircraft’.¹²³

Generally similar in conception to “combined arms” is the phrase “joint warfare”, although it is not as readily or specifically defined in current American or British doctrine. However, a concerted effort by the British in the early 1960s—one that will be discussed in detail later—produced a working definition that can be offered here. ‘Joint warfare’, an official 1962 British Chiefs of Staff (COS) document stated, was defined simply as: ‘The employment of sea and/or air forces in concert with land forces’.¹²⁴ Again, although conceptually similar, the most important difference to be noted here is that the resulting joint operations (*i.e.*, formerly “combined operations”) were never really performed by fully integrated forces or units (or even elements) of one service. This was significant with respect to British development, mainly due to the fact that the Royal Marines did not have the same supporting elements as inherent or organic parts of its Commando force structure, most notably with regard to artillery, armour, and air support. As such, their post-war role was arguably more akin to special forces operating amphibiously as opposed to amphibious forces performing special operations, although there was a notable shift from the former to the latter between 1945 and 1968.

“Doctrine”

Although the *official* promulgation of specialized amphibious/expeditionary warfare doctrine has been a relatively recent phenomenon, various forms of *unofficial* doctrine have arguably existed for centuries.¹²⁵ This fact notwithstanding, the concept of what doctrine is and why it is significant requires some explanation. Simply put, ‘doctrine means “whatever is taught;

¹²³ House, Jonathan M., *Combined Arms Warfare in the Twentieth Century*, Modern War Studies, Theodore A. Wilson, General Ed. (Lawrence, KS: University Press of Kansas, 2001), 4, which is the published form of *Towards Combined Arms Warfare: A Survey of Tactics, Doctrine, and Organization in the 20th Century*, Research Survey No. 2 (Ft. Leavenworth, KS: CSI, USAC&GSC, 1984), 2.

¹²⁴ COS (62) 426, 3.10.62 (DEFE 5/131; NA), 1.

¹²⁵ For one of the earliest examples, see Molyneux, Thomas M., *Conjunct Expeditions or Expeditions That Have Been Carried On Jointly by the Fleet and Army, with a Commentary on a Littoral War* (London: printed for R & J Dodsley, 1759).

what is held, put forth as true and supported by a teacher, a school, or a sect; it is a general body of instructions”...’.¹²⁶ More specifically,

doctrine is those shared beliefs and principles that define the work of a profession. Principles are: (1) basic truths, laws, or assumptions; (2) rules or standards of behavior; (3) fixed or predetermined policies or modes of action. Professions are occupations and vocations requiring training and education in a specialized field—training and education in the doctrine of that profession. Doctrine is the codification of what a profession thinks (believes) and does (practices) whenever the profession’s membership perform in the usual and normal (normative) way.¹²⁷

From the above, it can be gleaned that doctrine can apply to almost any organisation or group working toward a common goal, including such broad purposes as national security and defence. A country’s armed services (or branches within a single service), for instance, are generally concerned with *military* doctrines, which ‘are intended to be general guides to the application of mutually accepted principles, and thus furnish a practical basis for co-ordination under the extremely difficult conditions governing contact between hostile forces’.¹²⁸

There are many things that influence military doctrine and are influenced by it, all of which demonstrate doctrine’s central and enduring importance. Whilst those areas that influence military doctrine can include ‘current policy, available resources, current strategy and campaigns, current doctrine, threats, history and lessons learned, strategic culture, fielded and/or emerging technology, geography and demographics, and types of government’, military doctrine, in turn, can influence such aspects as ‘tactics, techniques, procedures, local tactical directives, rules of engagement, training and education, organization and force structure, [force capability] analyses, programming, campaign planning, strategy, and policy’.¹²⁹

Of the many types of doctrines that fall under the broader rubric of military doctrine, this thesis is concerned mostly with tactical doctrine. Although still indirectly influenced by most, if not all, of the concepts listed above, tactical (and operational) doctrine is much more task-specific and aims to provide designated forces (whether from one or more services) with

¹²⁶ Knox, Dudley W. (Lt. Cmdr., USN), ‘The Role of Doctrine in Naval Warfare’ in Text, Art of War Colloquium Publication (Carlisle Barracks, PA: USA War College, 11/83), 50.

¹²⁷ Tritten, James J., ‘Naval Perspectives for Military Doctrine Development’, research paper, NDC, Norfolk, VA, 9/94, 1-2.

¹²⁸ Knox, 50.

¹²⁹ Tritten, 6, 12, 14.

guidelines for the execution of particular operations—such as amphibious/expeditionary operations—which, when normatively employed, increase the chances of success. Again, more specifically:

Tactical doctrine organizes TTPs [Tactics, Techniques and Procedures]—it is the “play book” from which tactics are chosen and ordered.... **Tactics** is the selection and employment by the...tactical commander of a particular employment and movement of forces from...tactical doctrine “play books”.... **Techniques** are more specific instructions than are general tactics. They apply to [the] operation of individual systems and forces in particular functions.... **Procedures**, detailed instructions for [the] operation of equipment or units aimed at the operator, are often more rigid and directive than other levels of tactical guidance.¹³⁰

To sum up, the relevance of (tactical) doctrine to this thesis stems from what it reveals, not only about the state of amphibious/expeditionary warfare development at any given time but also about the substance of that development. These revelations allow *national* changes and trends to be identified, categorised and analysed which, in turn, enables *international* developments to be assessed and compared.

¹³⁰ Tritten, 12-13. First instance of bold typeface added; others in original.

PART ONE: 1945-1950

CONSOLIDATION OF NATIONAL APPROACHES

The parallel *but different* courses of American and British amphibious/expeditionary warfare development that had emerged by the end of the Second World War were generally consolidated between 1945 and 1950. At the same time, however, debates surfaced in both the United States and the United Kingdom amongst the various services and related organisational entities that, whilst reflecting the different international differences, did not substantially alter them, at least not until after 1950.

In the United States, the Naval Service appeared to secure almost exclusive legal responsibility for the development of ‘amphibious operations’ due to their legendary efforts at conducting ‘seizures’ during the island-hopping campaign in the Central Pacific. At the same time, the US Marine Corps embarked on a groundbreaking course to develop a new concept for amphibious assaults in an atomic environment. This centred on the use of helicopters to transport troops during the ship-to-shore phase of an amphibious operation (*i.e.*, effectively, amphibious ‘vertical envelopment’). The US Army challenged this situation, mainly by drawing on its wartime *expeditionary* experience in the European and Southwest Pacific theatres, which ultimately involved so-called ‘joint amphibious operations’ that were very similar, if not almost identical, to British ‘combined operations’. This challenge stemmed from the changed geo-strategic situation where the pivotal threat to the US (and the ‘west’ in general) was increasingly emanating from yet another—and perhaps far greater—threat to continental Europe (if not also to all of ‘Eurasia’) by the Soviet Union and its satellite states. As a result, if a situation similar to 1940 were to evolve where the US (and its allies) faced an occupied European continent, large-scale, Normandy-type invasions would almost certainly be required.

Facing the same threat but in closer proximity, the United Kingdom moved to consolidate its own, almost exclusive *expeditionary* experience during the war. This was accomplished primarily by retaining the existing Combined Operations Headquarters (COHQ) establishment and maintaining its corresponding ‘combined operations’ concepts, techniques and

doctrine. Not only did this encompass the large-scale amphibious ‘invasions’ as conducted in North Africa and Europe, but it also included ‘raiding’ and ‘beach organisation’ operations (with the latter entailing ‘beach maintenance’ efforts and ‘withdrawals’). This overall consolidation occurred despite attempts by the Admiralty to have COHQ abolished, ostensibly so that the former could gain primary, if not also exclusive, responsibility for amphibious operations (as apparently was the case in the US). While these efforts failed, the Royal Marines were at least able to secure exclusive responsibility over the ‘commando’ (or amphibious *raiding*) role which, whilst an exclusive wartime role of the Army between 1940 and 1942, had a long tradition within the Royal Marines.

CHAPTER ONE: THE UNITED STATES, 1945-50

OVERVIEW

The immediate post-war period of amphibious/expeditionary warfare development in the United States has popularly been characterised as being one in which the Marine Corps—in the face of Army intransigence and apparent ignorance—consolidated its rightful place as the country’s sole and true amphibious warfare specialist.¹³¹ It did so not only by capitalising on its legendary success of the Central Pacific ‘storm landings’ of World War II, but also by conceptualising, in the late 1940s, the use of the helicopter (*i.e.*, referred to as ‘vertical envelopment’) during the ship-to-shore movement of an amphibious assault. This was at a time when the US Army’s (and the public’s) attention was turned towards the ongoing occupational duties in both Germany and Japan, which were particularly taxing as a result of massive demobilisation efforts, and while the newly-independent US Air Force was pre-occupied with strategic (atomic) bombing.

Building on new research, particularly Boose’s recent publication on Army amphibious operations during the Korean War,¹³² this chapter will undertake a comprehensive examination of developments in the US *as a whole* in order to fully ascertain the extent of American *national* progress between 1945 and 1950. This review will involve assessments of both the ‘navy-centered’ side (*i.e.*, the US Naval Service) as well as joint developments, including purely ‘army-centered’ ones. Whilst some functional differences will be more readily apparent at the organisational/institutional level, as they relate simply to single service (*i.e.*, the US Naval Service) versus joint service (*i.e.*, Army-Navy, plus Air Force) issues, the more complicated conceptual and doctrinal variances will be revealed at the tactical/operational level.

As a result of this examination, it will become apparent that, by 1950, the Army had mounted an open (if largely unsuccessful) challenge to the alleged exclusivity afforded the Naval Service with regard to amphibious/expeditionary developments. This ultimately involved the role

¹³¹ For various examples, see Introduction, 15-18.

¹³² See Introduction, 21.

of amphibious landings in relation to naval warfare on the one hand and land warfare on the other. On the *naval* side were ‘amphibious operations’, which basically centred on the seizure and defence of advanced naval and air bases as part of a naval campaign; on the *land* side were ‘joint amphibious operations’, which consisted primarily of large-scale invasions that required the resources of at least two services to initiate unlimited land campaigns. It was this latter approach, in turn, which reflected the British overall approach towards ‘combined operations’, essentially at all three levels of analysis.

STRATEGIC ASPECTS

By the end of 1945, the United States had fought a ‘two-ocean’ war by defeating two separate and different enemies, as was reflected in the names of the respective theatres of operations: a largely *continental* enemy in the combined form of Nazi Germany and fascist Italy in the European Theatre of Operations (ETO); and a largely *naval* enemy in the form of Imperial Japan in the Pacific Ocean Area (POA).¹³³ With the gradual evolution of America’s erstwhile ally, the Soviet Union, into a superpower foe, it became evident that this new enemy was much more of a continental threat to Western Europe than a direct naval threat to the United States in the Pacific.¹³⁴ As a result, this drew America’s strategic attention towards Europe instead of the Pacific which, presuming that Russia would invade and occupy the entire European continent in any future war, meant that ‘invasion’-type operations of the kind employed in the ETO during World War II would almost certainly be required. Indeed, this situation seemed to hearken back to that of the United Kingdom in 1939 (and 1940), something which that country seemed to be facing yet again.

Defence Policy

Generally speaking, the immediate post-war years (*i.e.*, 1945 to 1950) can be described as the first phase of the Cold War, or a period of transition during which the Soviet Union

¹³³ See Morison, Samuel E., *The Two-Ocean War: A Short History of the United States Navy in the Second World War* (Boston, MA/Toronto: Little, Brown & Co., 1963). See also King, Ernest J., (ADM, USN), *US Navy at War, 1941-1945: Official Reports to the Secretary of the Navy* (Washington, DC: USN Department, 1946), 167.

¹³⁴ See Gaddis, John L., *The Long Peace: Inquiries Into the History of the Cold War* (New York, NY/Oxford: OUP, 1987), Chapters 2-4.

evolved from a wartime ‘great power’ ally to a peacetime ‘superpower’ foe. As this stage has been widely studied and analysed, it does not bear recounting in detail here.¹³⁵ However, a few observations can and should be made about the evolution of US basic national security policy as they will provide first, the strategic context in which amphibious/expeditionary warfare development evolved and second, an indication of what kinds of such operations would be employed: *amphibious* or *expeditionary*, or both.

By March, 1946, the Joint Chiefs of Staff (JCS) had firmly concluded that ‘[f]rom a military point of view, the consolidation and development of power of Russia is the greatest threat to the United States in the foreseeable future’.¹³⁶ This, in turn, resulted in the approval by the President of NSC 20/4,¹³⁷ which provided not only the underlying framework to the official ‘containment’ strategy as briefly articulated by George Kennan in his ‘X’ article of July 1947,¹³⁸ but also the first specific insight into the potential need for amphibious/expeditionary operations in a future war that would pit the naval power of the United States (and presumably her allies) against the land power of the Soviet Union and her satellite states. NSC 20/4 specifically reiterated that ‘Soviet domination of the potential power of Eurasia...would be strategically and politically unacceptable to the United States’¹³⁹ and guided the US to sign the North Atlantic Treaty in April, 1949, effectively committing the country to the defence of continental Europe in case of armed Soviet attack. This ensured that, presuming that Soviet conventional might would indeed follow through on its estimated offensive capabilities, the US and her allies would almost certainly have to employ large-scale, Normandy-type ‘invasions’ (or *expeditionary* operations)—similar to those carried out in the ETO during World War II—to re-enter an occupied European continent. Finally, it also seemed possible that the US would have to resort to raiding operations,

¹³⁵ See, for example, Gaddis, John Lewis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (Oxford/New York, NY: OUP, 1982), Chapters 1 and 2.

¹³⁶ SWN-4096, 3/29/46, in *FRUS*, 1946, Vol. I, *General; The United Nations* (Washington, DC: GPO, 1972), 1165.

¹³⁷ NSC 20/4, 11/23/48, in *FRUS*, 1948, Vol. I, *General; The United Nations*, Part 2 (Washington, DC: GPO, 1976), 662-669.

¹³⁸ ‘X’, ‘The Sources of Soviet Conduct’, *FA*, XXV (7/47), 566-582.

¹³⁹ NSC 20/4, 665.

as had been conducted by the British Commandos (and US Rangers at Dieppe) in the first few years of the last war.

War Plans and US Navy Strategy

War Plans

As the post-war geo-strategic situation began to unfold, war plans were drafted, which essentially pitted America's naval/maritime and nuclear air strength against the 'land power' of the Soviet Union. On 2 March 1946, a paper by the Joint War Planning Committee (JWPC), titled 'Concept of Operations for Pincher', was circulated, which established 'a number of basic strategic assumptions that were to be the basis of all future plans for the next several years'.¹⁴⁰ The first assumption was that only the first few phases of any future war would or even could be covered in an operational plan, which meant that offensive operations specifically including amphibious/expeditionary ones were largely omitted. However, it was clear that no matter how the war started, it 'would become a total global conflict' similar to World War II. Second, Great Britain 'was America's most important ally' as it basically served as an advanced naval and air base. Third, as Western Europe was considered 'indefensible', British and American forces would have to 'withdraw to the British Isles and Italy'. Finally, the Middle East was viewed 'as the crucial strategic arena in World War III' as air attacks were planned 'from bases in the Cairo-Suez area, and amphibious forces would attack Southern Russia via the Mediterranean and Persian Gulf'.¹⁴¹

One of the first of these war plans, Emergency War Plan (EWP) BROILER (which was first drafted in early 1948), followed most, if not all, of the aforementioned precepts.¹⁴² A revised version of BROILER, Plan FROLIC, was drafted in March, 1948, and provided slightly more guidance on the possible employment of 'seizures' to take or occupy advanced bases along the periphery of the European continent including Iceland as well as 'the Azores and

¹⁴⁰ Ross, Steven T., *American War Plans, 1945-1950* (New York, NY/London: Garland Publishing, 1988), 28.

¹⁴¹ Ross, 28-29.

¹⁴² Ross, 61-70.

Casablanca.’¹⁴³ A subsequent update, Plan CRANKSHAFT, included the option of an amphibious campaign through the Persian Gulf with ‘an amphibious assault on Bandar Abbas’, the subsequent seizure of ‘Qatif and Bahrain’, and, finally, a ‘major blow at the Kuwait-Basra area, thereby securing a beachhead at the head of the Persian Gulf.’ Whilst another offensive approach involved the seizure of ‘a base area in the Casablanca-Port Lyautey region of French Morocco’, from which amphibious campaigns could be initiated ‘into the Mediterranean, Spain, or northwest Europe’, others focused on the ‘reconquest of the Aegean’ as well as advances ‘into southern Russia via the Aegean and Black Seas’.¹⁴⁴

Beginning with HALFMOON in April 1948, another series of short-range, emergency war plans were drafted based on the assumptions outlined in the original PINCHER paper. By 1949, HALFMOON had evolved into what was eventually labeled as plan TROJAN. Unfortunately, this plan as well as the related mobilisation plans, all suffered from serious logistical problems and budget constraints, which forced the JCS to abandon them altogether. By this time, however, both the Western European Union (WEU) and NATO had been formed, which allowed ‘the JCS to reexamine [sic] the possibilities of defending Western Europe’.¹⁴⁵

In sum, whilst perhaps lacking detail, these war plans generally confirmed that the primary theatre of war was the European portion of the ‘Eurasian’ continent. This implied that any sort of attack against a coastline held by the Soviets would have to involve large-scale ‘invasions’ or, in the British vernacular, so-called ‘combined operations’. At the same time, however, there were quite a number of opportunities for the ‘seizure’-type of endeavour to be employed, namely to seize advanced naval and air bases along the periphery of the European/Eurasian continent, including, for example, Iceland, the Azores, the Canary Islands, and even perhaps such islands as Sicily, Sardinia, Corsica, and Crete. As such, these options gave both the Naval Service as well as the Army (and Air Force) the geo-strategic rationale from which to base and formulate their own *amphibious* and *expeditionary* operations, respectively.

¹⁴³ Ross, 71-72.

¹⁴⁴ Ross, 86-89.

¹⁴⁵ Ross, 89-98.

US Naval Strategy and Forces

The US Navy emerged from WWII without any competitor. It was supreme at sea in a victory that seemed so complete that some in America even questioned why the country still needed a Navy at all.¹⁴⁶ However, due to the emerging threat of the Soviet Union, particularly to Western Europe, it quickly became evident that the Naval Service would be required in the earliest phases of any future war, particularly with regard to warfare in the littoral. As a Marine Corps Board Report promulgated at the end of 1948 concluded: ‘Due to the high improbability of a contending hostile surface fleet, it is felt that naval action will be characterized largely by surface and air escort, anti-submarine warfare, and *the early seizure of advanced naval bases to insure complete control of vital sea areas*’.¹⁴⁷ In addition, whilst the geo-strategic situation and concomitant war plans tended to highlight the need for large-scale amphibious/expeditionary operations to liberate an occupied Europe (as had been done in World War II), they also indicated a similar requirement for the seizure and occupation of advanced air and naval bases on the periphery of the Eurasian land mass from which strategic air attacks and (eventually) land attacks could be launched.¹⁴⁸ Among the most important of these peripheral bases—as indicated in Naval Service war planning and training documents—were Bahrain in the Persian Gulf,¹⁴⁹ Iceland,¹⁵⁰ the Azores, the Cairo-Suez area, the Port Lyautey-Casablanca area, and Sicily.¹⁵¹

Many of these types of objectives were similar to the ones that the Navy and Marine Corps had had to deal with in the Central Pacific during the Second World War. Nevertheless, there was some scepticism expressed at the time as to the ability of the FMF specifically and the Naval Service in general to handle the larger and more significant objectives (typical of the ETO

¹⁴⁶ See Baer, 275-276; and Palmer, Michael A., *Origins of the Maritime Strategy: American Naval Strategy in the First Postwar Decade*, Contributions to Naval History, No. 1 (Washington, DC: NHC, 1988), 1.

¹⁴⁷ MCB, *Organization of the Fleet Marine Force – War and Peace*, 12/1/48 (RG 127: GSF, Box 47; NARA), 3. Emphasis added.

¹⁴⁸ Palmer, Chapters 1, 3.

¹⁴⁹ FMF, Pacific, *Operation BRIGHTNESS*, [10/47] (RG 127: RU&OC, Box 134; NARA).

¹⁵⁰ See MCS, *Advance Base Problem VIII, STOVEPIPE*, 1947; and MCS, *Advanced Base Problem X: MONARCH, Parts I-III*, 1949. See also MCS, *Advanced Base Problem IX: MERMAID*, 1948, 2 Vols. (RG 127: RTE&M, Boxes 13, 7; NARA).

¹⁵¹ Op-30W8 Memorandum For Op-30, 6/25/48; DCNO (Ops) Memorandum For Admiral W.H.P. Blandy, USN, 9/23/48; Op-30B Office Memorandum to Op-03, 10/26/48; and DCNO (Ops) Memorandum For Admiral W.H.P. Blandy, USN, 11/10/48; (SPDR: Box 244; OAB, NHHC).

in World War II) that would ultimately include having to expel the Soviet Army from the European continent.¹⁵² As one Marine Corps commentator—somewhat ironically—remarked,

no matter how efficient or well trained, the Fleet Marine Force can never achieve the final decision against a first-class power. The force is too small. Under naval control it can seize naval objectives, it can establish beachheads, but the U.S. Army must deliver the knockout blow. Hence the Navy can deliver the Army to the enemies' shores, it can help devastate the enemies' homelands, but from here the Army must carry the brunt of the load. For only the Army can destroy the enemies' divisions and seize his homelands.¹⁵³

ORGANISATIONAL/INSTITUTIONAL ASPECTS

After World War II, it was realised that some form of defence re-organisation was necessary to manage and direct the defence establishment during peacetime. As such, a 'unification' process, which had already begun during the war, proceeded in the immediate post-war years and resulted in the approval of the National Security Act (NSA) of July, 1947. This created a National Military Establishment (NME) of three military Departments as well as a number of other agencies to help administer, direct and manage the vast defence establishment. While this went a long way toward centralising America's defence effort, it simultaneously allowed each of the military Departments considerable independence and self-sufficiency. This, however, led to disagreements arising with regard to the roles and missions of the various armed forces (or services), which ultimately required a separate agreement to be worked out amongst the Service Chiefs less than a year after the NSA was passed. Although this agreement, or so-called 'Functions Paper', seemed to clarify most, if not all, of the issues specifically dealing with 'amphibious operations', there was some apparent ambiguity that still existed relating to so-called 'joint amphibious operations', which the Army attempted to exploit in order to gain primary developmental responsibility for what essentially amounted to *expeditionary* warfare. What was interesting about the latter agency's organisational concepts was how much they resembled the system that actually existed in the United Kingdom at the time, specifically in the form of the extended Combined Operations Headquarters (COHQ) establishment.

¹⁵² Henderson, Frederick P., (Lt. Col., USMC), 'Concerning "Target Eurasia"', *MCG*, 32:3 (3/48), 12; and Spykman, Nicholas J., *The Geography of the Peace* (New York, NY: Harcourt, Brace & Co., Inc., 1944), 49.

¹⁵³ Schanzle, R. F., (Capt., USMC), 'Sea Power – A New Testament', *MCG*, 33:9 (9/49), 15.

Army and Navy ‘Philosophies’ of War

By the end of World War II, due to the massive scale in which the armed forces of the United States had been involved (and were now spread across the globe in occupational duties), the political and military leadership realised that a permanent, unified defence organisation was required to direct and manage the armed forces in the post-war world. This effort, however, did not bear fruit until mid-1947 because of general differences of opinion in how this new defence establishment should be organised. These differences stemmed from the Navy’s and the Army’s development of modern (*i.e.*, three dimensional) warfare over the past forty years, which culminated in their varying experiences in the Pacific Area of Operations (PAO) and the European Theatre of Operations (ETO), respectively, during World War II.

What had effectively emerged were differing ‘philosophies’ of how each service employed military forces in the field to wage war. These were outlined and described in a Navy Department study, which had been instigated at the request of the Marine Corps in order to develop a ‘basic military philosophy....which can be adopted as the official Navy view’.¹⁵⁴ This study, submitted to the Secretary of the Navy on 26 August 1946, explored ‘the underlying differences between the Army and the Navy in the employment of military forces’.¹⁵⁵

Each Service’s philosophy was outlined in detail and described the conceptual rationale for varying approaches towards the process of defence unification. Based on its experience with facing increasingly independent-minded aviators within its own ranks, the Army’s concept of employing military forces in the field was summarised as follows:

This concept, which has been referred to on occasion as the “tri-elemental concept” and may be likened to a “Type Organization”, is founded on the central idea of a completely unified command with rigid subdivision of responsibility based on the three elements, land, water and air and a grouping of weapons and personnel into separate coordinate services wherein everything on land is the Army’s, everything that floats belongs to the Navy and everything that flies is the province of the Air Force. This theory excludes the conception of seapower as we have come to understand it through the teachings of Mahan. It likewise equally rejects airpower and landpower as such and advocates a conjunct method of waging war employing the Army, Navy and Air Force, not as three

¹⁵⁴ Hurst, E. H. (Col., USMC), Memorandum for ADM Robbins, ‘Importance of A Basic Military Philosophy to the Army’s Unification Case’, 8/2/46 (RG 127: RRMOP&O, Box 28, File 8, Part 2; NARA), 7.

¹⁵⁵ Radford, A. W. (VADM, USN) and T. H. Robbins, Jr. (RADM, USN), Memorandum to the Secretary [of the Navy], 8/26/46 (RG 127: RRMOP&O, Box 28, File 8, Part 2; NARA), 1.

elemental powers each in itself capable of far reaching accomplishment, but as incomplete components of a conglomerate whole.¹⁵⁶

Accordingly, the Army's idea for post-war defence organisation therefore revolved around a Chief of Staff (complete with a supporting General Staff) directing essentially a single, highly-centralised entity with 'Land', 'Sea' and 'Air' components. From these three components, "Type Organizations" would be created 'requiring joint agreements for any battle and reorganization for each operation'.¹⁵⁷

Concomitantly, the Navy concept of warfare was also presented, which was based on having its own aviation as well as limited ground forces.

[T]he underlying concept of the organization of naval forces is that of "Task Organization." [It]...involves an application of the principles which gave us predominant Seapower to the other two elements....Such a concept holds that warfare knows three types of campaigns, land, naval, and air. At times two, or even all three, of these are coincident as to time and place of application or are related sequentially. When this relationship is close and immediate we have a joint form of operation; when there is no relationship they may be considered as separate campaigns. This requires that each major service be reasonably self-contained and constitute a balanced force.¹⁵⁸

Accordingly, the Navy's idea for post-war defence organisation revolved around the JCS directing three separate entities that effectively operated as 'Landpower', 'Seapower' and 'Airpower'. From these, 'Task Organizations' would be created that were 'capable of prosecuting campaigns on land, at sea or in the air over enemy territory, by the appropriate organization if expedient, or by joint operations if on a magnitude to require [them]'.¹⁵⁹

This over-arching principle of 'Seapower' was specifically seen by the Navy as 'a specialized professional mission, capable of being understood and executed only by the nation's professional experts in such matters: the Navy',¹⁶⁰ which thus caused it to oppose unification and joint organisation efforts throughout the Cold War. Indeed, by one account, this philosophy had actually morphed into "a peculiar psychology..., which frequently seemed to retire from the

¹⁵⁶ [USN], 'Basic Issue of the Unification Controversy – A Consistent Military Concept for Integrated Strategic and Tactical Use of Weapons and Armed Personnel in the Application of Three-Element Power in Modern Warfare', [8/46] (RG 127: RRMOP&O, Box 28, File 8, Part 2; NARA), 3.

¹⁵⁷ 'Basic Issue', [Appendix 1].

¹⁵⁸ 'Basic Issue', 3-4.

¹⁵⁹ 'Basic Issue', [Appendix 2].

¹⁶⁰ Schwartz, Peter M. et al., *Drawing Lines in the Sea: The US Navy Confronts the Unified Command Plan (UCP)*, 1946-99, CRM 99-3.09 (Alexandria, VA: CNA, 1/99), 68, 76-77.

realm of logic into a dim religious world in which Neptune was God, Mahan his prophet, and the United States Navy the only true Church”¹⁶¹.

The National Security Act of 1947 and 1949 Amendment

The different ‘philosophies’ of warfare were at the root of the opposing stances that the Services took in the unification debate. On the one hand was the Army which, while accepting that a ‘separate and coordinate air force...was...inevitable’, nevertheless promoted a highly centralised defence organisation with a ‘single military budget controlled by the JCS’ that would ensure ‘adequate ground troops’ and ‘restrict the Marine Corps to functions that were strictly non-competitive with those of the Army ground forces’. On the other hand was the Navy, which, while favouring a de-centralised defence organisation, kept as its ‘priority...combat effectiveness along with its perceived “indispensible prerequisite”—a strong Navy with the wartime functions of naval aviation and the Marine Corps unimpaired’.¹⁶²

The National Security Act (NSA), of 1947, and subsequent 1949 amendments to it, were a compromise in which created a centralised defence executive organisation, first called the National Military Establishment (NME) but eventually becoming the Department of Defense (DOD). It allowed for each Service to retain a considerable degree of independence and self-sufficiency, mainly in the form of balanced, combined arms force structures.¹⁶³ With respect to the broader ‘philosophy’ of ‘seapower’, this represented a landmark event in which the Department of the Navy (DN) retained its naval aviation arm as well as the Marine Corps. In fact, not only did the Act ensure the existence of the Marine Corps, but it also specifically defined the Corps’ primary function as the country’s amphibious landing forces, thus consolidating an evolution that had begun at the turn of the century. As the Act stated:

¹⁶¹ Schwartz, 55. The quotation is from former Secretary of War, Henry Stimson.

¹⁶² Keiser, Gordon W., *The US Marine Corps and Defense Unification, 1944-47: The Politics of Survival* (Washington, DC: NDU Press, 1982), 40-47. See also Historical Division, Joint Secretariat (JCS), *Organizational Development of the Joint Chiefs of Staff, 1942-1989* (Washington, DC: DOD, 11/89), Chapters II, III; and Hammond, Paul Y., *Organizing for Defense: The American Military Establishment in the Twentieth Century* (Princeton, NJ: PUP, 1961), Chapter 8.

¹⁶³ ‘The National Security Act of 1947—26 July 1947’, in Cole, Alice C., et al. (eds.), *The Department of Defense: Documents on Establishment and Organization, 1944-1978* (Washington, DC: OSD, Historical Office, 1978), 35-50.

The United States Marine Corps, within the Department of the Navy, shall include land combat and service forces and such aviation as may be organic therein. The Marine Corps shall be organized, trained and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. It shall be the duty of the Marine Corps to develop, in coordination with the Army and the Air Force, those phases of amphibious operations which pertain to the tactics, technique, and equipment employed by landing forces.¹⁶⁴

Ironically, the Act did not accord similar responsibilities to the Navy's amphibious forces which shared equal, if not more, responsibility with the Marine Corps as integrated partners in the naval service's amphibious warfare team. The role of the Marine Corps, as the Navy's combined arms landing forces, was thus ensured as part of the broader function of the naval service. This differed from the system in the United Kingdom, where the Combined Operations Headquarters organisation maintained responsibility for the development of so-called 'combined operations'.

The 'Functions Paper' of 1948

Prior to the NSA being approved, the three Service Chiefs had agreed that 'the proper method of setting forth the functions (now often termed as roles and missions) of the armed forces' was to have the President to issue an Executive Order at the same time that the NSA was signed into law.¹⁶⁵ As such, President Truman issued Executive Order 9877, *Functions of the Armed Forces*, on 26 July, 1947, by which he 'prescribe[d] the...primary functions and responsibilities to the three armed services'.¹⁶⁶ After some concerns of the Services had been aired, the Service Chiefs agreed on a paper entitled 'Functions of the Armed Forces and the Joint Chiefs of Staff' on 21 April 1948, otherwise known as the 'Functions Paper'.¹⁶⁷

In citing 'the basic policy embodied' in the NSA, the 'Functions Paper' first listed a number of 'Principles', 'Common Functions of the Armed Forces' and the 'Functions of the Chiefs of Staff'. As one of the main aims of the creation of the DOD had been to integrate 'the Armed Forces into an efficient team of land, naval and air forces', the Paper directed that all doctrines and plans for 'joint operations and exercises shall be jointly prepared' by the three

¹⁶⁴ 'The National Security Act', 42.

¹⁶⁵ 'War-Navy Agreement—September 1946-16 January 1947' in Cole..., 32-33.

¹⁶⁶ 'Executive Order 9877—26 July 1947' in Cole..., 267-270.

¹⁶⁷ 'Functions of the Armed Forces and the Joint Chiefs of Staff—3 February-21 April 1948' in Cole..., 274-285.

Services. While the Services were also responsible for providing forces for all ‘joint operations’, the JCS were tasked to ‘approve policies and doctrines for:...[j]oint operations, including joint amphibious and airborne operations, and for joint training’.¹⁶⁸ In effect, while this gave the JCS the ultimate authority in approving joint doctrine, it was up to the individual services to coordinate and draw up an agreed doctrine together. As discussed in the next chapters, however, not only did this decentralised and deliberative process not prevent each individual Service from promulgating its own amphibious warfare doctrine unilaterally but it also precluded much progress from being made with respect to the promulgation of official joint amphibious warfare doctrine, at least until 1967 when such doctrine was finally approved by all the Services.

The ‘Functions Paper’ also accorded each Service both ‘Primary’ and ‘Collateral’ functions. Most significantly, it reiterated the Navy’s and Marine Corps’ primary roles in the seizure of advanced bases and their corresponding responsibilities to organise, equip and train naval and landing forces, respectively, for ‘amphibious operations’. However, only the Navy was accorded similar responsibilities with regard to developing ‘doctrines and procedures for *joint* amphibious operations’, a responsibility shared with the Army and the Air Force which were also to provide, equip and train their respective forces for such enterprises. While the Marine Corps was given ‘primary interest in the development of those *landing force* tactics, technique, and equipment which are of common interest to the Army and the Marine Corps’ (*i.e.*, for ‘amphibious operations’), nothing was specifically mentioned about the latter’s responsibilities with respect to ‘*joint* amphibious operations’.¹⁶⁹

As the language above indicates, the Marine Corps’ responsibility with regard to the development of amphibious landing force doctrines, tactics, technique and equipment did not seem to extend to ‘joint amphibious operations’. Whilst not specifically defined in the main text, the term was referred to in the Glossary of Terms and Definitions of the ‘Functions Paper’ under the definition of an ‘amphibious operation’ which read as follows:

¹⁶⁸ ‘*Functions*’, 274-285.

¹⁶⁹ ‘*Functions*’, 280-283. Emphasis added.

Amphibious Operation—An attack launched from the sea by naval and landing forces embarked in ships or craft involving a landing on a hostile shore. An amphibious operation includes final preparation of the objective area for the landing and operations of naval, air and ground elements in over water movements, assault, and mutual support. *An amphibious operation may precede a large-scale land operation in which case it becomes the amphibious phase of a joint amphibious operation.* After the troops are landed and firmly established ashore the operation becomes a land operation.¹⁷⁰

By introducing the notion of an ‘*amphibious phase* of a joint amphibious operation’ and drawing a parallel between the latter and ‘a large-scale land operation’, the above description undermined what had appeared to be the fundamentally *naval* character of all ‘amphibious operations’, thus shifting the relationship of amphibious warfare between naval and land warfare more towards the latter. It was this particular emphasis that the Army would use to challenge the naval approach towards ‘amphibious operations’, not only in the late 1940s but more so in the 1950s. To paraphrase the language used in the National Security Act quoted in full above, whilst the Naval Service viewed ‘amphibious operations’ as (limited) land operations essential to the prosecution of a naval campaign, the Army perceived them as (limited) naval operations essential to the prosecution (or, more accurately, *initiation*) of a large-scale land campaign.

TACTICAL ASPECTS

Whilst developments at the strategic and institutional level generally led towards the increased centralisation of defence policy and organisation, developments at the tactical level, while apparently reinforcing the consolidation of a national approach toward *amphibious* warfare, actually revealed the beginnings of a significant divergence of opinion within the defence establishment. On the one hand was the Department of the Navy which, mainly through the efforts of the Marine Corps, forged ahead with its revolutionary helicopter assault concept, thus adding credence to its apparent primacy with regard to amphibious warfare development. On the other hand was the Army which, in an ongoing effort to increase the centralisation of the defence establishment even further (notably around the concept of ‘land power’ vice ‘sea power’ or ‘air power’), began to mount a conceptual challenge to the Navy Department’s primacy by differentiating between ‘amphibious operations’ and ‘joint amphibious operation’, between

¹⁷⁰ ‘*Functions*’, 284.

‘seizures’ and ‘invasions’ and, ultimately, between *amphibious* and *expeditionary* warfare. As with its efforts to challenge the Navy Department from an organisational standpoint, the Army’s ultimate objective at the tactical/operational level essentially resembled the ‘combined operations’ concept that had effectively been enshrined in the British COHQ system.

Post-World War II Amphibious Warfare—State of the “Art”

The US had garnered a vast array of amphibious experience in World War II which essentially fell into two major categories. The first kind, which was primarily employed in the Central Pacific by the Naval Service (*i.e.*, the US Navy and Marine Corps), consisted of small- and medium-scale amphibious assaults or ‘storm landings’ to seize and defend island naval and air bases. The second type, which was typical of the enterprises conducted by the Army and Navy in the ETO (and SWPA), consisted of large-scale joint amphibious ‘invasions’ or expeditions that required the landing of a large joint expeditionary force or forces on a major (continental) land mass.

US Navy Doctrine and Concepts

As the Navy had been central in the execution of both types of amphibious operation, it was not surprising that it produced the first and most comprehensive set of operational doctrine. As part of a post-war process to revise all doctrinal, tactical and instructional manuals, a Tactical Publications Panel of combat-experienced officers was established within the Office of Chief of Naval Operations (OCNO). This panel produced drafts of basic publications which were circulated to commanders afloat and ashore for comments and critiques, with ‘subsidiary publications...prepared by forces afloat and the Marine Corps [that] were edited in the Navy Department for approval by the Chief of Naval Operations’. These publications were entitled ‘United States Fleets’ (USF) manuals and generally represented ‘the best service opinion and the best knowledge of naval warfare...in 1946’.¹⁷¹

¹⁷¹ OCNO, ND, USF 1, *Principles and Applications of Naval Warfare, United States Fleets, 1947*, 5/1/47 (WWIICF: USFPS, Box 269; OAB, NHHHC), XI.

The basic volume covering amphibious operations, USF 6, *Amphibious Warfare Instructions*, was promulgated on 20 August 1946.¹⁷² While defining an ‘Amphibious Operation’ as an ‘overwater assault by armed forces, transported primarily by ships and craft, to effect a landing and seizure of an objective on a hostile shore’, the manual also identified and defined the two major types:

Amphibious Invasion—An amphibious operation which inaugurates a major overseas operation of unlimited objective, and subsequent amphibious landings in furtherance of that campaign.

Amphibious Seizure—An amphibious operation of limited objective to seize and hold a hostile, or in some cases a friendly, land position, for a specific purpose or purposes.¹⁷³

Taken together, these two definitions represented the majority of those amphibious operations that had been conducted in the two (or even three) major theatres during the war. The former represented those major invasions in the ETO (as well as certain ones in the Southwest Pacific Area) while the latter exemplified those ‘storm landings’ of the Central Pacific.

Interestingly, the ‘keystone’ USF publication, USF 1, *Principles and Applications of Naval Warfare*, promulgated on 1 May 1947,¹⁷⁴ actually expanded on the above types of enterprises, which testified to the breadth and complexity of amphibious warfare in general and, more particularly, foreshadowed some of the disagreement that would ensue between the Naval Service and the Army. While the term ‘Amphibious Operations’ was included in a chapter on offensive naval operations and defined similarly as in USF 6, USF 1 offered a broader methodology to categorise these enterprises, stating that the ‘character and the magnitude of an amphibious operation are determined largely by the relative position of the target area to enemy centers of war-making power, and by the extent and vulnerability of pertinent enemy lines of communication which cross the sea’.¹⁷⁵

¹⁷² OCNO, ND, USF 6, *Amphibious Warfare Instructions*, *United States Fleets*, 1946, 8/20/46 (P1946CF: USFPS, Box 531; OAB, NHHC), XI.

¹⁷³ USF 6, 1—2 and 1—3. The two other types of operations were ‘Amphibious Demonstration’ and ‘Amphibious Raid’. Underlining added.

¹⁷⁴ USF 1, III.

¹⁷⁵ USF 1, 4—7.

Using this point of reference, it identified ‘three general situations’, the first, and most significant, being the one that would almost certainly be required in any future war against the Soviet Union once it had conquered continental Europe. This particular situation involved the

[c]apture of a beachhead on an enemy continent, or homeland, within easy reach of his centers of war-making power and with lines of communication little, if at all, exposed to our attack. Such deployment of major land and air forces into continuous land contact with the enemy involves expansion of one or more comparatively limited beachheads into a major front, before the enemy can drive us back into the sea, or isolate and confine our effort. Such an operation always requires the early capture and development of one or more suitable and conveniently located ports and airdrome areas to insure an adequate build up. In such an operation, the speed with which we are able to build up our fighting strength on land, and its adequate logistics support, is an essential factor in the successful launching of the resulting land campaign.¹⁷⁶

Included in this classification would have been such massive enterprises as the landings in Normandy and the planned invasion of the Japanese home islands.

A second type of large-scale operation followed, which involved the capture ‘of a beachhead on a continent, or a large group of islands, beyond immediate reach of enemy centers of war-making power’. While this type similarly involved consolidating one or more beachheads, it involved an enemy with ‘limited additional strength to bear’ as well as ‘limited reinforcement’ capabilities.¹⁷⁷ This category would have included the majority of large-scale World War II operations including the landings in North Africa and on the Italian peninsula, the capture of very large islands such as Sicily, Okinawa, and various ones in the Southwest Pacific, as well as the incursion into southern France.

The last type epitomised those assaults performed during the island-hopping campaign in the South and Central Pacific and was classified simply as capturing ‘an atoll, or small island, so situated that the enemy has small possibility of reinforcement of his local defence forces and limited ability to exert pressure from outside by air or sea’.¹⁷⁸ Notable examples would have been from the Pacific, such as Guadalcanal, Tarawa, Saipan, Peleliu, and Iwo Jima.

¹⁷⁶ USF 1, 4—7-4—8.

¹⁷⁷ USF 1, 4—8.

¹⁷⁸ USF 1, 4—8.

Apparently focusing only on these last types of situations was USF 63, *Amphibious Instructions, Landing Forces*, which was promulgated in March, 1947.¹⁷⁹ This manual was drafted by the Navy's landing forces, the Marine Corps, a fact revealed by the manual only offering three of the four types of operations listed in USF 6, notably 'Seizures', 'Demonstrations' and 'Raids'.¹⁸⁰ Missing were 'Invasions' or any other larger-scale types of operations offered in USF 1, which illustrated the Marines' experiences with—and probably preferences for—the relatively limited operations in the Central (and South) Pacific and therefore the narrower idea of amphibious warfare as a form of *naval* and not *joint* (or, perhaps, *maritime*) warfare. Furthermore, although the authors did mention large-scale landings, they made sure to separate amphibious operations—as distinctly naval affairs—from land operations, even if the former were employed to initiate the latter.

Where the amphibious operation is preliminary to a large-scale land campaign or invasion, *the seizure of the initial position or beachhead is the final joint incident of the amphibious operation*. This will normally involve action by Joint Forces with over-all naval responsibility terminating when the Army forces are firmly established ashore....¹⁸¹

This description would directly contradict that of a 'joint amphibious operation' that appeared with the release of the 'Functions Paper' in April of 1948, as discussed above, which stated that when an amphibious operation preceded a large-scale land campaign, it was merely the amphibious phase of a (larger) 'joint amphibious operation'.

Atomic Weapons and Amphibious Warfare

The doctrinal manuals also took into account, as much as they could, the newest developments in weapons and warfare to include their assessments and future predictions. As part of a ten-year forecast as to 'Trends in Future Naval Operations', USF 1 offered a number of sober yet balanced assessments about new weapons and war-fighting methods. On the one hand, whilst acknowledging the 'power and destructiveness' of nuclear weapons, as well as the potential of 'guided missiles and high speed aircraft', the manual warned against 'uninformed

¹⁷⁹ OCNO, ND, USF 63, *Amphibious Instructions, Landing Forces*, 1947, 3/12/47 (PWWIICF: USFPS, Box 531; OAB, NHHHC).

¹⁸⁰ USF 63, III.

¹⁸¹ USF 63, 1—1. Emphasis added.

comment that all other weapons or forms of warfare are obsolete'. On the other hand, the manual, in specifically citing the success of strategic bombardment, carrier warfare and amphibious operations, also stated that the United States 'must not assume that all the tactics, dispositions and maneuvers developed from war experience in World War II will remain valid in the next war'.¹⁸² This last pronouncement foreshadowed the attitude taken by the Marine Corps in their continuing pursuit of innovative tactics, techniques and equipment.

The potential destructive effect of atomic bombs was also taken up in USF 6 which dealt more closely with these effects at the tactical level. This analysis was based on the evidence collected from Hiroshima and Nagasaki as well as that from two nuclear tests conducted in July of 1946 on the Bikini atoll of the Marshall Islands in the central Pacific Ocean. The destructive results, while still extraordinary, were nevertheless not quite as devastating as originally believed.¹⁸³ Some analysts did point out the potentially debilitating effects of radioactivity; the tests generally seemed to shift the focus of using atomic bombs from the tactical level to the strategic. The fact that there were very few of these weapons in existence throughout the late 1940s—and none possessed by the USSR until late 1949—supported this shift as these extremely rare and costly weapons had to be reserved for employment against only the highest value targets, *i.e.*, political and industrial centres.¹⁸⁴ This demonstrated, at least to some, that atomic bombs would not necessarily have an overwhelming destructive impact on certain aspects of conventional warfare, including amphibious warfare.

The Naval Development of 'Amphibious Operations'

One of the witnesses to the Bikini tests, Marine Corps Lieutenant General Roy S. Geiger, was there specifically to ascertain the potential impact of atomic weapons on amphibious operations. In a letter to the Commandant of the Marine Corps (CMC), General Alexander A.

¹⁸² USF 1, 11—3.

¹⁸³ See __, 'Report of the President's Evaluation Commission on the First Bikini Test'; and __, 'Vice Admiral Blandy's Initial Report on Second Atomic Bomb', *USNIP*, 72:9 (9/46), 1238-1239, 1239-1240. See also __, 'The Atomic Bomb Tests', *JRUSI*, 91:564 (11/46), 590-592.

¹⁸⁴ __, 'Operation Crossroads Findings', *USNIP*, 72:9 (9/46), 1241; and Strobe, Walmer E., 'The Navy and the Atomic Bomb', *USNIP*, 73:10 (10/47), 1221-1227.

Vandegrift, General Geiger described what he felt the future held for the conduct of amphibious operations against an enemy with atomic weapons while quite possibly outlining the future attitude of the whole Marine Corps towards atomic weapons for the next generation: 'It is quite evident that a small number of atomic bombs could destroy an expeditionary force as now organized, embarked and landed. Such a force might not fare so badly on the high seas, if properly dispersed...[but w]ith an enemy in possession of atomic bombs, I cannot visualize another landing such as was executed at Normandy or Okinawa'.¹⁸⁵ As will be discussed below, this same assessment was made by Army General Omar N. Bradley in congressional testimony in October of 1949. Whilst Geiger's quotation is rarely cited by Marine Corps historians, the latter's statement has been frequently used as 'evidence' that the Army was generally ignorant of amphibious warfare and out of touch with modern developments.¹⁸⁶

His negative prediction notwithstanding, General Geiger offered a more positive conclusion on the future of amphibious warfare as it then existed, which effectively foreshadowed the evolution of amphibious warfare development in the US for the next decade: 'It is my opinion that future amphibious operations will be undertaken by much smaller expeditionary forces, which will be highly trained and lightly equipped, and transported by air or submarine, and movement accomplished with a greater degree of surprise and speed than has ever been heretofore visualized. Or that forces must be dispersed over a much wider front than used in past operations'. In the end, no matter what course needed to be pursued, General Geiger simply suggested that 'Marine Corps Headquarters...use its most competent officers in finding a solution to develop the technique of conducting amphibious operations in the atomic age'.¹⁸⁷

¹⁸⁵ Quoted in Clifford, *Progress*, 71; and Till, Geoffrey, *Modern Sea Power: An Introduction*, Brassey's Sea Power: Naval Vessels, Weapons Systems and Technology Series, Volume 1 (London: Brassey's, 1987). Misleadingly quoted in Simmons, *Marines*, 180; and Heinl, *Soldiers*, 512.

¹⁸⁶ See, for example, Alexander/Bartlett, 1-2; and Heinl, *Soldiers*, 530, 536; *Victory*, 4-8.

¹⁸⁷ Clifford, *Progress*, 71.

The Marine Corps Special Board: A New Concept Formulated

This recommendation was agreed to by the Commandant who formed a Special Board that presented its report in December of 1946.¹⁸⁸ The ‘Advance Report of Special Board, Commandant of the Marine Corps’ consisted of three separate studies: ‘Employment of Helicopters for Ship to Shore Movement’, ‘Damage Effects of the Explosion of An Atomic Bomb’, and ‘Special Equipment for Amphibious Operations’. Whilst the first paper, which used the second’s data and analysis from the Japanese and Bikini atomic detonations, outlined the debilitating effects that ‘an underwater atomic mine’ or ‘an air burst at about 650 feet altitude’ would likely have had on the landing force at Iwo Jima (two Marine Divisions along a 3,500-yard frontage),¹⁸⁹ the last paper basically presented the Special Board’s conclusions and recommendations. Its summary is worth quoting at length as it outlined the central focus of the Marine Corps’ (and Navy’s) investigation of—and experimentation with—new amphibious warfare concepts, techniques, doctrine and equipment for the next quarter-century:

The atomic bomb now prohibits the heavy concentrations of ships and landing craft heretofore used in amphibious operations. The answer lies in a wide dispersion of our attack force, a [rapid] concentration of our landing force by means other than small boats or amphibians and thereafter maintaining close contact with the enemy.

Airborne operations by landplane transport, by parachute or by glider are not suitable for Marine Corps employment nor are they politically expedient. Submarine transport will be useful but to a limited extent.

The development of a combination of large flying boats and helicopters will overcome the limitations of a purely airborne method, keep the enterprise a purely naval one, and permit its rapid exploitation and support from widely dispersed and more economical surface vessels.¹⁹⁰

The report went on to emphasise the helicopter’s central role in the *initial* assault—to attack ‘a landing area from the flank or rear’—although the broader scheme of manoeuvre still involved conventional means used in the past war as they were ‘more economic’ to land heavier weapons and units such as tanks, field artillery and engineers, specifically ‘by means of landing ships or cargo seaplanes sufficiently dispersed to avoid presenting a profitable target’.¹⁹¹

¹⁸⁸ Clifford, Progress, 72

¹⁸⁹ See [SB, CMC], ‘Employment of Helicopters for Ship-to-Shore Movement’, [12/46] (HAF 744, Box 41; AB, MCRC), 1-2; and [SB, CMC], ‘Damage Effects of the Explosion of an Atomic Bomb’, [12/46] (HAF 744, Box 41; AB, MCRC).

¹⁹⁰ [SB, CMC], ‘Special Equipment for Amphibious Operations’, [12/46] (HAF 744, Box 41; AB, MCRC), 1.

¹⁹¹ ‘Special Equipment’, 7.

Parts II and III of the 'Special Equipment' paper were proposed four-year development programs for seaplanes and helicopters, respectively, for the years 1947 through 1950, whilst Parts IV and V included very brief analyses of the performance of the two types of machines in question. Of the three types of seaplanes that were readily available, only the Martin 'JRM' or 'Mars', which could carry 133 fully-equipped troops, seemed to be in contention.¹⁹² Of the nine types of helicopters that were analysed, two were considered seriously at the time: the single-engine Sikorsky HO3S-1 trainer-type model and the single-engine, twin-rotor (fore and aft folding-bladed) Piasecki XHRP-1, dubbed the 'flying banana', which could carry 6-8 troops plus a crew of two.¹⁹³

Helicopters, Exercises and Doctrine: A New Concept Tested

As requested, reports outlining the military requirements for helicopters and seaplanes for amphibious operations were submitted to the CMC in March and October of 1947.¹⁹⁴ Subsequent initiation of these helicopter and seaplane transport programs, under the direction of the Commandant, Marine Corps Schools (CMCS), was authorised by the CMC, although priority was given to the helicopter as seaplanes were initially seen as '*supplementary* fast troop and cargo carriers'.¹⁹⁵ In planning to establish a developmental helicopter unit for the Marine Corps, the Chief of Naval Operations (CNO) began including plans to this effect in June, 1947, and the CMC finally established Marine Helicopter Squadron One (HMX-1) on 1 December 1947.¹⁹⁶

HMX-1's primary mission was to develop the tactics and techniques for the employment of helicopters in the ship-to-shore phase of the amphibious assault and evaluate a small helicopter to replace the Marine Corps' fixed-wing observation aircraft. It tested several concepts and equipment over the course of several exercises, mostly notably PACKARD II. Whilst the employment of the helicopters in the ship-to-shore movement proved feasible, unlike the

¹⁹² 'Special Equipment', 14-18.

¹⁹³ 'Special Equipment', 19-29.

¹⁹⁴ CMCS ltr Serial 001120 to CMC, 3/10/47 (HAF 744; AB, MCRC); and CG [MCS], ltr Serial 001170 to CMC, 10/29/47 (HAF 743, Box 41; AB, MCRC).

¹⁹⁵ CMC, ltr Serial 008A35346 to CMCS, 12/19/46 (HAF 744, Box 41; AB, MCRC), 1. Emphasis added.

¹⁹⁶ Rawlins/Sambito, 19-20.

previously-articulated concept of helicopter operations which called for the *initial* assault to be made by helicopter-landed troops, the helicopter movement was actually *preceded* by a landing of conventional craft about two hours prior to the helicopters touching down. Despite this technical detail, the overall exercise—which also focused on logistics, air support, tanks, artillery, and naval gunfire—was a complete success.¹⁹⁷ As such, the underlying concept of employing helicopters to land assault infantry and other lighter elements ashore from carrier-type ships proved both feasible and practicable.

Pursuant to the guidance outlined by the CMC in response to the requirements reports on helicopters, the CMCS set out to formulate a tentative helicopter doctrine for general use. Although rudimentary instructions had already been put together prior to the PACKARD II exercise in ‘mimeograph instructional form’,¹⁹⁸ an additional pamphlet, entitled ‘The Employment of Helicopters in the Amphibious Attack’, was specifically drawn up in preparation for the exercise ‘to provide students with a working background for the problem and a general appreciation of the current concept of helicopter employment’.¹⁹⁹ This pamphlet was revised after the training exercise and was ultimately released as PHIB-31, *Employment of Helicopters (Tentative)*, 1948,²⁰⁰ which was the thirty-first in series of ‘Amphibious Operations’ instructional pamphlets, known as ‘PHIBs’, being prepared by the Marine Corps Schools.

Like the other PHIBs in the series, PHIB-31 was less of an actual doctrinal publication and more of an instructional, background text which aimed to provide ‘the basis for a body of doctrine governing helicopter landing operations’.²⁰¹ Although the significance of the manual itself has sometimes been exaggerated, specifically with comparisons to the groundbreaking doctrine issued in 1934,²⁰² it should be emphasised that this manual only addressed one specific aspect of the amphibious assault—the ship-to-shore movement—and that it involved only one

¹⁹⁷ MCS, *Amphibious CPX [Operation PACKARD II]*, Sections VI, VII; and Cmdr., AmphGp TWO, U.S. AtlFlt [CTF-86] ltr Serial No. 695 to Cmdr., AmphForce, U.S. AtlFlt, 6/12/48 (EF: Box 26; AB, MCRC); and Marine Corps Helicopter Squadron 1 (HMX-1), *Operation PACKARD II (10-26 May 1948)*, n.d. (HAF 284, Box 13; AB, MCRC).

¹⁹⁸ Clifford, *Progress*, 77, and Rawlins/Sambito, 25.

¹⁹⁹ *Amphibious CPX*, II-10.

²⁰⁰ MCS, PHIB-31, *Employment of Helicopters (Tentative)*, 1948 (Library; MCHC).

²⁰¹ PHIB-31, 1.

²⁰² See, for example, Alexander/Bartlett, 28.

piece of equipment, the HRP-1 transport helicopter, which had yet to be operationally tested in order to assess its potential in amphibious operations. This was not remedied until the next year when another command post exercise, PACKARD III, involved the employment of eight HRP-1 transport helicopters to simulate a 184-helicopter force lifting an RCT from six (simulated) escort carriers. Although only a total of 240 personnel and 14,000 pounds of equipment were lifted approximately 10 miles (six miles inland), the exercise was declared a complete success. Not only did these results seem to confirm those achieved in PACKARD II, but they also ‘left no doubt to the future value of helicopters in amphibious assaults’.²⁰³

The (Joint) Development of ‘Joint Amphibious Operations’

As discussed previously, an assertion about the future of amphibious warfare in the atomic age, made by Army General Omar N. Bradley during testimony at a House Armed Services Committee hearing on 19 October 1949, has often been cited as ‘evidence’ that the Army was (or continued to be) somewhat out of touch with or a step behind the practice of landing on hostile shores. A closer examination of his full remarks, however, reveals that his statement was not only technically accurate but also did not differ appreciably from the one made by Marine Corps General Roy Geiger less than three years before. In General Bradley’s words,

[u]ndoubtedly, without Navy support, any amphibious operation is impossible. However, by appraising the power of the atomic bomb, I am wondering whether we shall ever have another major scale amphibious operation. Frankly, the atomic bomb, properly delivered, almost precludes such a possibility. I know that I, personally, hope that I shall never be called upon to participate in another amphibious operation like the one in Normandy.²⁰⁴

This quote has been referred to by many historians who promptly cite the amphibious assault at Inchon on 15 September 1950 as proof that General Bradley was wrong in his claim.²⁰⁵ Such reasoning is misleading, however, mainly because the North Koreans had no atomic bombs to employ against the attacking force which therefore did not disprove General Bradley’s statement.

²⁰³ See Commander, AmphGp Two, Serial 0298 to Commander, AmphForce, US AtlFlt, 6/25/49; and Commander-in-Chief, US AtlFlt, Serial 0731 to CNO, 9/20/49 (RG 127: RTE&M, Box 9; NARA II); and Rawlins/Sambito, *Marines and Helicopters*, 27.

²⁰⁴ ___, ‘Department of the Army Views on Amphibious Operations Presented by Representatives of the DA Chief of Staff (G-3) and Army Field Forces at Conference with Staff and Faculty, C&GSC, Ft. Leavenworth, 10 April 1950’, [4/10/50] (RG 127: RRDAWD, Box 1(4); NARA), 1.

²⁰⁵ See footnote 186.

In fact, the amphibious landing was conducted in a completely conventional setting with few differences, if any, from certain operations performed during the Second World War. The main shortcoming in General Bradley's testimony, if any, was arguably the fact that he did not seem to offer any possible solutions to the problem, whereas General Geiger did.

Early Joint and Army Amphibious/Expeditionary Doctrine

As will be seen below, one of the main concerns that would arise from early joint amphibious training and exercises involved the lack of viable joint amphibious operations doctrine. A few efforts in this area were made immediately following the war but with negative results. Amongst the first was a proposal for a new joint doctrinal manual in early 1946 although this was rejected by the Navy because of concerns that such a document would be too 'voluminous' and that such a project was more suited for the Marine Corps Schools as it was allegedly 'the only institution to specialize in amphibious and lower echelon Joint Operations'.²⁰⁶ The second also occurred the same year, when the Navy declined to endorse a doctrinal paper issued by a Joint Board at the Army and Navy Staff College, titled *Joint Overseas Operations* because it represented too much of an 'Army sponsored view'.²⁰⁷

In fact, the only joint manual that was applicable to amphibious operations at that time was the 1935 edition of *Joint Action of the Army and the Navy (JAAN)* which had last been updated with Change Number 20 in December of 1946.²⁰⁸ It addressed what had been referred to in the 1930s as 'Joint Overseas Expeditions', although its guidance was a bit ambiguous, if not contradictory, specifically with regard to command relationships.²⁰⁹ In addition, the manual left considerable leeway with regard to formulating and practicing each service's own functions,²¹⁰ a situation compounded by the ambiguities and contradictions evident in the NSA and the 'Functions Paper', as discussed above.

²⁰⁶ See Op-30 Serial 35P30 to Op-34, 2/7/46 (SPDR: Series XIV, Box 198; OAB, NHHC), 1.

²⁰⁷ [USN/USMC], 'Chronology of Significant Developments in the Evolution of Amphibious Command and Organization Questions Since 1900, with Limited Reference Data', 7/2/56 (RG 127: RRDAWD, Box 3, File 9; NARA), 4.

²⁰⁸ ND, FTP 155, *Joint Action of the Army and the Navy, 1935* (WWICF: FTPPS, Box 108, OAB, NHHC), 5-6 (Change No. 17, 6/26/45).

²⁰⁹ FTP 155, 6 (Change No. 17).

²¹⁰ FTP 155, 2 (Change No. 1, 7/22/36).

The Army's own landing operations doctrine, FM 31-5, *Landing Operations on Hostile Shores*, which was categorised under the 'special operations' series of US Army Field Manuals (FMs), had not yet undergone any sort of revision since last issued in 1944 and therefore could not clarify any of the above contentions.²¹¹ In addition, the Army's capstone doctrine, FM 100-5, *Field Service Regulations, Operations*, the new edition of which had just been released in mid-August of 1949, only had one section on 'Joint Amphibious Operations'.²¹² Whilst it did not incorporate any of the definitional language found in the 'Functions Paper' and only had one section devoted to the specific subject, the manual described these types of enterprises as having five different 'purposes' which seemed to imply that they were essential to the general prosecution of land warfare.

Army Training and Joint (Amphibious) Exercises

In recounting early US Army amphibious training and exercises, it must be remembered that the Army was considerably preoccupied in the first few years after the war with occupation duties, with nearly half of the service's approximately 550,000 men still serving overseas in mid-1948.²¹³ Still, various smaller Army units such as battalions and regiments did undergo some basic amphibious troop training.²¹⁴ This ranged from rudimentary demonstrations and exercises for the cadets of the US Military Academy and the midshipmen of the US Naval Academy at the annual summer CAMID exercises beginning in 1946,²¹⁵ to on-site training by the specially-formed Marine Corps' Troop Training Units (TTUs) prior to joint fleet exercises,²¹⁶ and, finally, to a large-scale exercise conducted by the Sixth Army in 1946, which was notable for the Army's critique of the so-called 'Mid-Pacific doctrine' and practice that did not seem to cater enough to

²¹¹ See WD, FM 31-5, *Landing Operations on Hostile Shores* (Washington, DC: US GPO, 11/44).

²¹² DA, FM 100-5, *Field Service Regulations, Operations* (Washington, DC: US GPO, 8/15/49), Chapter 11 ('Special Operations'), Section XII.

²¹³ DOD [OSD], *Second Report of the Secretary of Defense and the Annual Reports of the Secretary of the Army, Secretary of the Navy, [and] Secretary of the Air Force, For the Fiscal Year 1949*, [12/31/49] (Washington, DC: US GPO, 1950), 142.

²¹⁴ For an overview, see Boose, 65-68.

²¹⁵ US AtIflt Serial ___, *Operation (ComPhibLant) Plan No. 2-48 (CAMID III)*, 4/23/48; and US AtIflt, Serial 0286, *Operation Order (ComPhibGru 2) No. A4-49, (CAMID IV)*, 7/1/49 (RG 127: RTE&M, Boxes 7, 8; NARA).

²¹⁶ TTU, ATC, US AtIflt, to Distr., 12/31/46 (EF: Box 32; AB, MCRC), 1-2; CG, TTU, US AtIflt, ltr Serial No. 227-49 to CG, US Army Forces, 2/24/49; Lt. Col. V.H. Krulak, USMC, ltr to Asst. CMCS, 3/8/49; and Col. S.G. Taxis, USMC, ltr to Asst. CMCS, 3/15/49 (EF: Box 33; AB, MCRC).

‘continental operations’.²¹⁷ Only in the late-1940s did the Army begin participating in larger routine joint exercises from which a number of (somewhat disparate) conclusions materialised. These, in turn, lent increasing credence to the Army’s own conceptualisation of amphibious/expeditionary warfare which primarily involved large-scale ‘joint amphibious operations’ like the ‘invasions’ undertaken during World War II.

Whilst the Navy focused many of its early training efforts on a range of exercises including a number of cold weather tests (seeing that the Soviet Union coastline extended far into arctic and sub-arctic waters), the Army’s primary concern centred on conventional, large-scale joint amphibious operations (otherwise known as ‘joint overseas expeditions’), which involved such aspects as concepts, joint doctrine, fire and air support, and logistics. One of the most significant of these exercises, Operation SEMINOLE, which involved the Army, Navy and Air Force, was held at the end of October 1947 in Panama City, Florida,²¹⁸ specifically to ‘develop the technique of loading and landing armored forces and heavy equipment’, another primary concern of the Army in any large-scale continental operation.²¹⁹ In keeping with the concept of what existing doctrine labelled as ‘invasions’, Operation SEMINOLE was actually the initiation of a subsequent ground offensive (code-named APACHE) in which a (simulated) infantry division was to carry out the ‘landing and assault’ phase while an actual armoured division (2d Armoured) would, by landing on ‘D-day plus 1’, contribute to the subsequent ‘reinforcement and resupply’ and ‘consolidation’ phases to prepare for the breakout and support of further land operations.²²⁰

The exercise was judged to be successful although a few poignant recommendations were made by the Commanding General, Fourth Army, which revealed the Army’s focus on the latter-phase aspects of joint amphibious operations. Aside from a logical request for a ‘study for

²¹⁷ Boose, 68. See also SIXTH ARMY, *Report on Amphibious Training Program*, [12/12/46] (MHI Stacks: U260.W47.U5; Library, AHEC).

²¹⁸ ___, ‘Exercise Seminole’, *USNIP*, 74:1 (1/48), 103-4; and Fraser, Angus M. (Maj., USMC), ‘Amphibious Armor’, *MCG*, 32:3 (3/48), 14-17.

²¹⁹ HQ, Fourth Army, *Report on 1947 Amphibious Training Program (Exercise SEMINOLE)*, 8/6/48 (RG 127: RTE&M, Box 6; NARA), 4.

²²⁰ *Report*, 5, and USF 6, 1—4.

determining new methods of, and equipment for, landing heavy equipment', the other primary recommendation related to the requirement to produce joint doctrine 'applicable to all three-services' which had to address command relationships and 'the difference in organisation of a Marine Division and an Infantry Division of the Army since these differences vitally affect the planning and execution of amphibious operations' (mainly because of the heavier nature of the latter).²²¹

Operation MIKI, which was conducted in October of 1949 in Hawaii, was the largest joint amphibious exercise held since the end of the war.²²² It involved a simulated invasion of the Hawaiian Islands by the 2nd Infantry Division using more than 43,000 personnel from all branches of the military as well as 100 naval vessels and more than 300 aircraft.²²³ Although an overall success, there were many areas in which deficiencies emerged, particularly ones which had already been pointed out by SEMINOLE. Most significant—and a foreshadowing of controversies between the Army, Air Force, and the Navy/Marine Corps in the 1950s—was a specific critique of the status of *joint* amphibious/expeditionary development as opposed to *naval* amphibious development. As the exercise's presiding (Army) officer lamented,

[a]mphibious technique and equipment are not keeping abreast of other developments in modern warfare. Equipment is obsolete. Techniques and doctrines, based on World War II experience, and designed for use against specific enemy island strongholds are not entirely applicable to warfare waged against a continental and modernly equipped enemy. New weapons necessitate revisions of strategy, tactics, techniques, procedures, responsibilities, and equipment....²²⁴

The resulting recommendations focused primarily on clarifying obvious disagreements that the Army had with the naval service's limited conceptualisation of amphibious operations. As such, the most significant requests were for '[m]odern definitions of amphibious warfare', 'revisions of amphibious responsibilities', 'clarification of supporting roles', and 'clear delineation of...the

²²¹ *Report*, 9.

²²² —, 'Oahu Maneuvers Completed', *USNIP*, 76:1 (1/50), 102-3.

²²³ MC Headquarters (JSMIKI-3 354.2/61) to C/S, US Army and CNO, *Final Report on Joint Army-Navy Exercise MIKI (FY 1950)*, 1950 (RG 127: RTE&M, Box 12; NARA), Section I.

²²⁴ *Final Report*, 3—4; and Commander, Naval Forces Western TF (COMPHIBPAC), Serial 0931 to MC, Joint Exercise MIKI, *Report of Joint Exercise MIKI (PACFLT EX. 49F)*, 12/10/49 (RG 127: RTE&M, Box 12; NARA), A—28/29.

Armed Forces to be equipped and trained for the paramount purpose of making the land attack'.²²⁵

Two more specific issues were raised, the first concerning joint doctrine and training. Whilst the need for joint doctrine was again indicated by the Army, it was recommended that the current doctrine (*i.e.*, USFs 6, 63, and 66) be approved by all the services for immediate use.²²⁶ A specific shortcoming with these naval manuals and the personnel using them as instruction guidelines concerned the fact that differences between Marine Corps and Army divisions were not taken into account, thus leading to a lack of uniform indoctrination and training.²²⁷

The second issue focused on establishing the beachhead and logistics. Although mention was made of efforts to use 'airborne' means to land assault forces and that they should be further studied, more attention was paid to the conventional shore party which had been deployed according to USF 63.²²⁸ Whilst successfully deployed, there was nevertheless some critique that not enough was being done towards developing 'improved techniques of unloading from ships to landing craft and from landing craft to the beach' which, in turn, resulted in calls for '[s]peeding up the ship-to-shore movement', developing larger, 'very high speed landing craft' as well as 'faster and more durable amphibious vehicles'.²²⁹

A third joint exercise, PORTREX, which was held in February of 1950 in the area surrounding Puerto Rico, centred on the landing of the 3d Infantry Division (reduced strength) whilst also involving an air-dropped BLT of the 82nd Airborne Division.²³⁰ Central to this endeavour was the first large-scale execution of new dispersal techniques in which the 'basic concept of the entire ship-to-shore movement was to provide dispersal of ships and boat waves

²²⁵ *Final Report*, 4—1-4—2.

²²⁶ *Final Report*, 4—8-4—10, and 4—20.

²²⁷ See Headquarters, UG, Exercise MIKI, *Operation Plan JS MIKI 03*, 9/1/49, 2; and Commander, TF 131, and CG, 2d ID, ltr to MC Joint Exercise MIKI, 11/25/49, 2-3, 23. (RG127: RTE&M, Boxes 12, 13; NARA)

²²⁸ *Final Report*, 3—16, 4—17.

²²⁹ Headquarters, UG, ..., 3; and Robert E. Fojt, (Col., USMC), et al., *Memorandum for the Director, Division of Plans and Policies, Subj: Observer's Report of Joint Operation MIKI*, n.d. (RG 127: RTE&M, Box 13; NARA), 13-14.

²³⁰ ___, 'Amphibious and Arctic Maneuvers', *USNIP*, 76:3 (3/50), 338-339. See also Headquarters, Army UG, PORTREX, 'Submission of Report on Joint Puerto Rican Exercise, FY 1950, Portrex', 4/10/50 (EF: Box 33; AB, MCRC), I-1 – I-2, II-1.

and at the same time meet the troop schedule and scheme of maneuver'.²³¹ Whilst considered 'essentially feasible and practicable', 'of paramount importance', and 'worthy of continued test and experimentation', this technique also raised another issue that stemmed from a critical appraisal of the 'Mid-Pacific' naval approach towards 'amphibious operations' (*i.e., amphibious warfare*).

Inevitably, the question arises as to the validity of our present practice of landing in small personnel boats and craft designed specifically for conditions that were encountered in the South and Central Pacific during World War II. In this landing, wherein wind and water conditions were such as to very nearly preclude the landing in LVT and LCVP, it is believed that the same operation could have been carried out employing larger personnel and cargo carriers such as LSM and LSU, with a greater assurance of success against unfavorable weather but risking the chance of loss of large units by enemy action.²³²

In furtherance of this suggestion and as part of a general agreement to continue to pursue continued experimentation in this technique, the report not only recommended a program to develop larger landing craft but it also recommended that 'a concurrent program of amphibious ship design to enable transports to lift, and quickly and easily launch such craft' be carried out,²³³ advice that would gradually be realised in the 1950s.

Army Development of 'Joint Amphibious Operations'

Following on from a relatively weak doctrinal foundation but having gradually reignited its interest in and experience with large-scale joint amphibious landings through participation in a number of key exercises, the Army was eventually able to develop its own concept of amphibious/expeditionary operations. Although there was no real co-ordinated effort to do so, a number of different informational resources had become available by the end of 1949, including senior staff-level research and lectures, conclusions presented by special panels and instructor conferences, and the reports and recommendations resulting from the aforementioned exercises.²³⁴ Accordingly, a comprehensive report, entitled 'Department of Army Views on

²³¹ Commander, Naval forces INVASION (CTF 102) and Commander Joint Assault Force INVASION (CTF 104) (Commander, AF, US AtlFlt), Serial 0142 to Commander JTF INVASION (CG, V Corps), 4/13/50 (RG 428: ROCNO, Box 325; NARA), III(D)(5)-2.

²³² Serial 0142, III(D)(5)-4; and 'Submission of Report', III-13.

²³³ Serial 0142, III (D)(5)-7.

²³⁴ See Boose, 75-79.

Amphibious Operations', was drawn up in early 1950 and presented to the staff at the Army's Command and General Staff College at Ft. Leavenworth, Kansas, on 10 April.²³⁵

The report began by referring to the now familiar testimony given by General Bradley in October, 1949. It also included testimony by Army General Lawton Collins who, while agreeing with Bradley's seminal point concerning the threat of atomic weapons, re-emphasised the main concern of conventional joint amphibious operations, which separated the broader Army concept from the narrower naval methodology: 'Now, we feel that the business of getting ashore in an amphibious operation is only the start of the thing. You can almost always get ashore...but the operation doesn't end there. There is a tremendous logistical problem that follows....Then you have to break out of the rather limited beachhead if you expect to get anywhere'.²³⁶

Building on this fundamental detail, the report quickly presented a summary statement of the Army's position which suggested the foundations of a solution to executing large-scale, joint amphibious/expeditionary operations when attacking an enemy armed with nuclear weapons.

In general, large-scale amphibious operations in a future war appear to be outmoded by the atomic bomb. While large concentrations of forces may no longer be practicable, our offensive capabilities can be retained and improved by employing dispersion and developing great tactical mobility and logistical flexibility. To fully exploit these military advantages, the Army should be capable of conducting amphibious operations (probably of Corps size), either in series with other small-scale amphibious operations or in conjunction with airborne operations.²³⁷

Having thus rationalised a possible answer to conducting larger-scale (joint) amphibious operations in the face of atomic weapons, which it had apparently never abandoned, the Army looked to refine its concept of amphibious landings in relation to that championed by the naval service.²³⁸

In order to do so, the report first set about challenging the US Naval Service's primacy with regard to amphibious warfare development as had apparently been accorded by the NSA and the 'Functions Paper'. The central claim was that no service had been granted such exclusive

²³⁵ Cited above ('Army Views'), 63.

²³⁶ 'Army Views', 1-2.

²³⁷ 'Army Views', 2.

²³⁸ See, for example, Pratt, Fletcher, 'Beachheads of World War III', *MCG*, 32:8 (8/48), 20-25; Stuart, Arthur J. (Lt. Col., USMC), 'Mechanization of the Amphibious Attack [Part I]', *MCG*, 33:7 (7/49), 34-39; and 'Mechanization of the Amphibious Attack [Part II]', *MCG*, 33:8 (8/49), 26-31.

responsibility, particularly for ‘*joint* amphibious operations’ and a simple review of the applicable language in these official documents technically confirmed this to be the case. In short, whilst the Marine Corps was responsible for providing *naval* ‘landing forces’ for (naval) ‘amphibious operations’, the Army could still provide *Army* forces for ‘*joint* amphibious operations’.²³⁹

The report next addressed joint training, which it claimed was overwhelmingly naval in character due to the fact that the Marine Corps TTUs were staffed primarily with naval personnel and only used USF manuals. In recounting the Army’s earlier proposal to establish a ‘Joint Training Center’ (with the CNO as executive agent) in an attempt to institute a truly joint approach to amphibious operations, the report reiterated that the Naval Service’s training system only trained other (Army) units using a single service (*i.e.*, naval) rather than a joint approach.²⁴⁰ Again, this discrepancy was exacerbated by the fact that USF 63 did not even officially include ‘invasions’.²⁴¹ Furthermore, none of the USF publications had ever been approved by the other services, even as intermediate manuals as had been repeatedly recommended. The only governmental body that had indicated any sort of approval of the Joint Training Center scheme was a House Armed Services Committee on Unification and Strategy, which had sought to establish such centres for ‘all areas of greatest inter-Service controversy’, most particularly for ‘air matters, amphibious warfare, ground support-aviation, [and] airborne troops’.²⁴² As a matter of fact, it should be noted that these ‘Joint Training Center’ concepts very closely resembled the Combined Operations Centre (COC) establishment that had evolved in the UK by that time under the direction and guidance of the jointly-staffed Combined Operations Headquarters (COHQ).

²³⁹ ‘*Functions*’, in Cole..., 280-282.

²⁴⁰ ‘*Army Views*’, 4.

²⁴¹ USF 1 and USF 6 were basic manuals and not specifically geared toward landing forces. In addition, USF 63 and USF 47, *Manual of Training Exercises, Amphibious Force, 1946*, 6/10/46, were specifically concerned with naval amphibious forces.

²⁴² ‘*Army Views*’, 5.

The Army's main reasoning from the entire report was ultimately to redefine the concept of and approach towards what the Naval Service universally referred to as 'amphibious operations', which the Army thought was insufficient.

The Navy's concept of *amphibious operations* is believed to be limited to the seizure type of operation as defined and standardized by the USF texts. The Army does not question the soundness of the doctrines, procedures, and techniques contained in the USF texts as they pertain to operations of the island *seizure* type. However, *the Army does not consider this type of operation as inclusive of all amphibious operations.*²⁴³

From this basis, the Army began outlining its own definition of amphibious operations (or *expeditionary* warfare), which seemed to be more all-encompassing in general, but was instead much more closely related to land warfare specifically. Whilst still acknowledging an initial dependence on 'water-borne means for transport' and 'initial tactical and logistical support' in situations where amphibious landings were involved, the report literally characterised them as being '*types of land combat operations* in which amphibious techniques may be employed'.²⁴⁴

CONCLUSION

Thus, by the end of the 1940s, the Army had effectively begun to diverge from the predominantly accepted view that amphibious operations were smaller-scale, limited or finite (land) operations in support of a larger naval campaign. Indeed, it had tried to reverse this relationship by claiming that 'joint amphibious operations' essentially involved limited naval operations employed as the initial (or supportive) phase of a larger land campaign. From this perspective, the most difficult and challenging part of the whole enterprise therefore revolved around what would be identified as the 'consolidation' phase, rather than the 'assault' phase, of these endeavours, the latter of which being the central feature of *naval* 'amphibious operations'.

Through its limited but still significant experience with joint amphibious exercises and its re-examination of the Naval Service's conceptualisation of 'amphibious operations', the Army had established the foundations for a dispute—soon to be joined by the Air Force—over the country's course of amphibious/expeditionary warfare development. Ironically, this same

²⁴³ 'Army Views', 6-7. Underlining in original; emphasis added.

²⁴⁴ 'Army Views', 5-6. Emphasis added.

dichotomy of concepts and procedure marked the broader evolution of developmental courses between the US and the UK with the pre-dominantly (and officially) accepted approach of the latter resembling the US Army's joint *expeditionary* methodology.

CHAPTER TWO: THE UNITED KINGDOM, 1945-50

OVERVIEW

The British course of amphibious/expeditionary warfare development during World War II, which was based almost exclusively on its *expeditionary* experience in the ETO, was generally consolidated in the immediate years prior to the Korean War. Although largely driven by the evolving strategic threat to the European continent by the Soviet Union and her satellites, which threatened a repeat of the situation of 1940, this consolidation occurred primarily at the organisational/institutional and tactical/operational levels of analysis.²⁴⁵

At the former level, the Combined Operations Headquarters (COHQ) organisation was retained as a permanent, independent, inter-Service entity that was responsible for *all* types of ‘combined operations’. The main reason for doing so was to preclude a return to the unproductive circumstances of the inter-war years, when no such entity existed to even address combined operations issues. These were almost always of lower priority to the other Services as they diverted already scarce resources away from traditional strategic priorities. This was particularly true for the Admiralty which, whilst naturally having to devote the most resources of any of the Services, could least afford to give them up. As a result, it made a number of efforts to abolish COHQ altogether, which continued into the 1950s.

As mentioned, the retention of the Combined Operations establishment also meant that *all* types of ‘combined operations’ would continue to be addressed at the tactical level. As specifically outlined in the Chief of Combined Operations’ (CCO’s) directives, these ranged from ‘raiding’ to ‘beach organisation’-type operations, which included the ‘maintenance’ of expeditionary forces over beaches as well as their potential ‘withdrawal’ using similar means. Both of these variants seemed very probable in any future conflict were the Soviet Union to invade and eventually occupy all of continental Europe. Still the most prominent type of enterprise, however, was the so-called ‘invasion’ which, although theoretically facing

²⁴⁵ See Speller, *Role*, Chapter 2; and ‘Role’, Chapter Two.

obsolescence in the face of atomic weapons, was nevertheless expected, studied, and conceptualised. As a matter of fact, this last exercise was best illustrated by the appearance of a new *Manual of Combined Operations*, which was promulgated in early 1950.

STRATEGIC ASPECTS

Defence Policy and Strategy

Britain's geo-strategic position during the first few years after the war (*i.e.*, 1945-1950) gradually evolved into an integral part of the 'maritime' power bloc led by the United States which faced the 'continental' power bloc led by the Soviet Union and its 'satellite' states in Eastern Europe. Whilst Great Britain generally faced the same threats as did the United States, the danger to the UK was magnified by Britain's imperial overstretch (itself exacerbated by rapid demobilisation), its severe economic problems, and, probably most significantly, its geographic proximity to the European continent and the Soviet Union itself. As such, the British generally expected to find themselves on the immediate defensive in any future conflict with the communist bloc. This was similar to the situation that it faced during the first years of the Second World War, which implied that the full gamut of 'combined operations' would again be required, including 'raiding', 'beach maintenance'-type operations, and eventually so-called 'invasions'.

While the UK had already assessed that the Soviet Union was a potential threat as early as 1944,²⁴⁶ the country only began to flesh out the parameters of its defence policy in 1946 which, although more general than the plans outlined early on by the Americans, effectively served as immutable principles of Great Britain's security for a generation. These so-called 'three pillars' of British defence were outlined in January 1947 which, in turn, were based on two 'principles of defence': '(a) the defence of the Commonwealth's resources with which to fight a major war until an offensive with allies could be developed and (b) the holding of bases for the

²⁴⁶ Reynolds, David, *Britannia Overruled: British Policy and World Power in the 20th Century* (London/New York, NY: Longman, 1991), 155.

offensive’.²⁴⁷ The first ‘pillar’ focused on the defence of the UK, mainly from sea and air threats, and its development as an offensive base; the second was the protection of sea communications, primarily in the North Atlantic and approaches to the British Isles, but also throughout the Mediterranean and the Middle East; the last included maintaining a ‘firm hold’ on the Middle East itself, due to its geo-strategic value (Egypt in particular) and especially its oil resources.²⁴⁸

Another strategic review paper promulgated in November of 1947 reiterated the ‘three pillars’. It also outlined the general wartime roles of the armed forces which, with the possible exception of the ‘development of an offensive air force’, were almost exclusively defensive in nature. Nevertheless, in keeping with the defensive/offensive sequence of how a future war would be fought, ‘combined operations’ were mentioned only briefly. While there was no apparent need for ‘major combined operations, in the form of assault landing[s] by sea or air, in the early stages of war’, ‘[m]inor landing[s] in furtherance of land campaign[s] already undertaken might...be required, and large-scale combined operations might be required at a later stage’. For this reason, ‘the art of combined operations’ needed to be kept ‘alive in peace’, mainly through ‘research, experiment and development in the technique required’.²⁴⁹

Strategic War Plans

The combination of these last statements, which acknowledged the eventual employment of (offensive) combined operations, and the overall defensive nature of the aforementioned assessments, were summarily reflected in the early post-war British war plans that were promulgated in the face of the overwhelming strength of the Soviets’ conventional (land) forces on the European (or, more accurately, ‘Eurasian’) continent. ‘Until 1948, the basic British war plan in the event of a Red Army offensive was to evacuate British troops from the continent, assuming a 1940-5 scenario of retreat to the island prior to eventual recapture of the continent

²⁴⁷ COS (47) 5 (O), 23.1.47 (DEFE 5/5 NA), 1-3; and ‘The Three Pillars Strategy’ in Ritchie Ovendale, (ed.), *British Defence Policy Since 1945*, Documents in Contemporary History (Manchester/New York, NY: Manchester University Press, 1994), 36-37.

²⁴⁸ COS (47) 5 (O), 3-4; and COS (47) 79 (O) (Revise), 21.4.47 (DEFE 5/79; NA); and ‘Importance of Palestine with the evacuation of Egypt’, ‘The Chiefs of Staff and withdrawal from Palestine’, and ‘Agreement with the Americans over the Middle East’ in Ovendale, 38-41.

²⁴⁹ COS (47) 227 (O) (2nd Revise), 19.11.47 (DEFE 5/6; NA), 1-7.

with American help'.²⁵⁰ Indeed, while higher-level relations between the US and the UK had apparently been ebbing and flowing between 1946 and 1948, 'joint Anglo-American planning took place with the result that an emergency war plan was agreed in October 1948'. This plan, named DOUBLEQUICK (later SPEEDWAY) by the British and FLEETWOOD (later TROJAN) by the Americans, focused on securing the Middle East 'as an air base' as well as 'recapturing Middle East oil (a matter of particular concern to the United States)'. Exactly one year later, a new joint plan had been drafted, called OFFTACKLE by the Americans and GALLOPER by the British, which 'shifted' more focus onto North Africa.²⁵¹

It should be pointed out that, like the exclusively American war plans, these joint plans appeared to deal with the war during its opening (or defensive) phase only (again, with the exception of a strategic air offensive with atomic bombs). As such, the large-scale combined operations that had been mentioned in strategic policy papers as possibly occurring later on in the war were barely discussed. In fact, plans such as GALLOPER left the primary responsibility to the Americans to mount 'a re-entry operation into Western Europe from the south'. Still, by the time that NATO planning had begun in earnest, the British had called for 'offensive operations against the enemy's fleet, shipping, ports and land resources...',²⁵² the latter two of which would require a smaller-scale type of combined (amphibious) operation, namely, the raid.

ORGANISATIONAL/INSTITUTIONAL ASPECTS

Defence Re-organisation: The Ministry of Defence

In the immediate post-war period, Great Britain did not go through the same radical re-organisation of its higher defence establishment as did the United States. Instead, after initial overtures had been made during the war,²⁵³ a government-proposed plan, published in October 1946, did call for a general consolidation of 'the advances which had been made in recent years

²⁵⁰ Reynolds, *Britannia*, 195-6; and Eric Grove and Geoffrey Till, 'Anglo-American Maritime Strategy in the Era of Massive Retaliation, 1945-60' in Hattendorf, John B., and Jordan, Robert S., (eds.), *Maritime Strategy and the Balance of Power: Britain and America in the Twentieth Century* (New York, NY: St. Martin's Press, 1985), 275.

²⁵¹ 'Anglo-American', 276.

²⁵² 'Anglo-American', 277, 280.

²⁵³ COS (46) 33 (O), 12.2.46 (CAB 80/33; NA).

under the compulsion of war or of the threat of war'.²⁵⁴ Although an amalgamation of 'the three Services completely...under a single Minister of the Crown' was not 'wholly' discarded as a concept to be eventually used sometime in the future, it was nevertheless considered 'a step which could not and should not be taken here and now'.²⁵⁵ Still, the new plan outlined the official establishment of a 'new post of Minister of Defence, with a Ministry', with this Minister's functions, whilst focusing on the 'apportionment...of available resources between the three Services in accordance with the strategic policy laid down by the Defence Committee', also included the 'administration of inter-Service organisations, such as Combined Operations Headquarters...'.²⁵⁶

With the passage of the Ministry of Defence (MoD) Act, 'which came into force on 1st January, 1947', the 'essential features of the new system' began to come into effect.²⁵⁷ This included the aforementioned 'Ministry', although its administrative takeover of COHQ did not occur until 1 April 1948. From this point, two items are notable about this defence re-organisation, which had a direct effect on the development of amphibious/expeditionary warfare in the UK. The first concerned the fact that the Chief of Combined Operations (CCO), the head of COHQ, retained direct access to the Chiefs of Staff in an advisory capacity on most matters associated with 'combined operations', including policy, doctrine and training. Second, whilst 'the other [COHQ] establishments...at home and overseas—training, instructional, and experimental—[were] paid for by the Service Departments', financing for COHQ itself was taken over by the new Ministry of Defence, thus ensuring a high degree of independence from the Services as well as a certain degree of permanence.²⁵⁸

As a result of these changes, by 1950 COHQ had effectively garnered legal recognition (and protection) similar to that accorded the US Naval Service. In addition, the study and, to a lesser extent, practice of combined operations seemed to have been permanently secured through

²⁵⁴ Great Britain, Cmd. 6923, *Central Organisation for Defence* (London: HMSO, 10.46).

²⁵⁵ Cmd. 6923, 5.

²⁵⁶ Cmd. 6923, 7-8.

²⁵⁷ [Great Britain], Treasury, *Central Organisation for Defence* (London: HMSO, 6.50), 8.

²⁵⁸ [Great Britain], Treasury, 18.

the retention of a jointly-staffed COHQ organisation within the British defence establishment that was independent of the three Services and responsible directly to the Minister of Defence. This process had not been straightforward or easy, however, as evidenced not only by the general financial restrictions resulting from the poor British economy but also by the active resistance of the Admiralty, as discussed below.

The Evolution of the Combined Operations Headquarters (COHQ) Establishment

By 1944, the British Combined Operations Headquarters (COHQ) establishment had evolved from its inception in 1940 under Lt. Gen. A. G. B. Bourne, RM, as ‘Commander of Raiding Operations’ (and ‘Advisor to the Chiefs of Staff on Combined Operations’), to its early days up to 1941 under Admiral Roger Keyes, RN, as Advisor on Combined Operations (ACO), to one of its highpoints under Lord Louis Mountbatten, as Chief of Combined Operations (CCO), up to 1943. However, as it seemed to be increasingly overshadowed by the COSSAC organisation that was preparing for the invasion of France, COHQ came under increasing scrutiny as D-day approached.²⁵⁹

This drive was led by the Admiralty in early May, when the First Sea Lord (FSL) formally proposed ‘that the Royal Marine Corps should assume greater responsibilities...for the assault phase of Combined Operations’.²⁶⁰ The ‘modelling of the Royal Marines exactly on the lines of the US Marine Corps’ was not being suggested but the FSL nevertheless argued that it was high time that the Marines be given ‘a definite and statutory responsibility for the provision, training and technical development of all special assault forces’ in the future. This view was apparently supported by the CCO, whose attached memorandum agreed in principle that the Royal Marines should provide the ‘special units peculiar to seaborne assaults’, such as the ‘Commandos, Beach Groups, COPPs, etc.’,²⁶¹ although the CCO reversed course a bit when he elaborated on his previous position subsequent to the Admiralty’s memorandum.²⁶² Whilst

²⁵⁹ This subject area for the period 1945-50 has also been addressed by Speller; see *Role*, 46-60; and ‘Role’, 47-68.

²⁶⁰ COS (44) 414 (O), 11.5.44 (CAB 80/44; DEFE 2/1262, folio 1; NA), 1.

²⁶¹ COS (44) 414 (O), Annex (dated 29.2.44).

²⁶² COS (44) 433 (O), 16.5.44 (DEFE 2/1262, folio 2; NA).

generally agreeing that the Royal Marines should have more responsibility with regard to providing 'Units required for special amphibious tasks necessary for the assault phase of a combined operation', the CCO was now more adamant about retaining some sort of 'organisation which has strong Inter-Service representation, a constitutional position..., and...representation when necessary on the Chiefs of Staff level'. His main reasoning behind this approach appeared to be based on the mistakes of the inter-war years, which he foresaw as being repeated during the post-war era.

There will be a natural tendency for all three Services to look inward towards their own interests and organisation; and restrictions of finance and manpower will tend to make it difficult for three Services voluntarily to carry out measures which, though necessary from the point of view of future combined operations, will often conflict with purely Service interests.²⁶³

As will be seen, it was this exactly line of interpretation that ultimately ensured that COHQ would remain intact for nearly two decades after the war.

The COS discussed the aforementioned memoranda on 18 May and on the next day approved the Terms of Reference for an 'Ad Hoc Sub-Committee' that was to be formed under the chairmanship of Air Marshal N. H. Bottomley, Deputy Chief of the Air Staff.²⁶⁴ According to the brief 'Terms', the main purpose of this Committee was as follows: 'To consider future Inter-Service responsibility for amphibious warfare with particular reference to the employment of Royal Marines; *it being recognised that the retention of a Combined Service element on the lines of that already existing in COHQ will be essential to any future amphibious warfare organisation*'.²⁶⁵

On 29 June, less than a month after the largest amphibious assault in history had been launched, the so-called 'Committee on Inter-Service Responsibility for Amphibious Warfare', or 'RAW Committee', issued its report.²⁶⁶ The report's main conclusions were generally divisible into two categories: administrative (or organisational) and operational. With regard to the former

²⁶³ COS (44) 433 (O), 1-2.

²⁶⁴ See ___, 'Extract from COS (44) 161st Mtg d. 18.5.44'; COS (44) 94, 19.5.44; and ___, 'Extract from COS (44) 164th Meeting dated 19.5.44', 19.5.44 (DEFE 2/1262, folios 5-7; NA).

²⁶⁵ COS (44) 94, 1. Quoted by Speller in *Role*, 47-48; 'Role', 48.

²⁶⁶ COS (44) 116, 29.6.44 (CAB 80/44; DEFE 2/1262, folio 9; NA).

aspect, the Committee outlined the basis of the rationale for retaining COHQ, which was essentially a *permanent, independent* and *joint* organisation.

Preparation for amphibious warfare must become part of our permanent defence system. We cannot afford to rely on improvisation in the event of war.... Responsibility for amphibious warfare policy and in particular for training and technique should be vested in a Central Organisation, independent of the three Service Ministries but inter-Service in character. COHQ, as now organised, has both these characteristics and...should be retained permanently on broadly the present lines as the central organisation for this purpose....²⁶⁷

A number of arguments were used to support the conclusions regarding the retention of the COHQ establishment in particular. The underlying reason for retaining the *independence* of the 'Central Organisation' was 'because amphibious warfare, whilst involving all three Services, is the exclusive province of no one of them'. As a result, the report argued, if no such independent organisation existed, 'under pressure of economies, or for other reasons, insufficient attention will be given to the problems of amphibious warfare, and once again we may find ourselves insufficiently equipped to meet an emergency'.²⁶⁸ The main benefit of an inter-Service organisation was that 'each Service had its own contribution to make to the problem', which came in three ways: providing Service-specific knowledge, ensuring co-operation 'between the Central authority and the Service Ministries', and disseminating 'knowledge of Combined Operations...throughout the Services'.²⁶⁹

With regard to the operational parameters of the organisation/establishment, the report's central conclusion was that the 'three Services will have to provide the assault forces in time of war' and that, as a result, a 'standing specialist assault force is undesirable and not required'. At the same time, the report also outlined the main 'function of the Central Organisation', which was 'to assist the three Services to maintain their readiness for amphibious warfare, and...to provide the machinery for combined training'.²⁷⁰ Indeed, the Committee had given specific consideration to the creation of 'a Specialist Corps on the lines of the US Marines'. Its main

²⁶⁷ COS (44) 116, paras. 39(a), (b); (para. 3(a), (b) in cover letter).

²⁶⁸ COS (44) 116, para. 9. This also involved a recommendation for continued 'financial independence' (paragraph 14).

²⁶⁹ COS (44) 116, para. 10.

²⁷⁰ COS (44) 116, para. 39(f); (para. 3(f) in cover letter).

disadvantage, however, revolved around the simple fact that ‘it does not fit into the framework of the operations which must be undertaken primarily by the army supported by air forces’, as had been done in the recent war. Not only would such a force ‘become redundant’ after the assault phase, but it was also believed that it was simply unaffordable to maintain a sizeable enough ‘specialist force’ in the first place.²⁷¹

The report also considered an ‘Alternate Scheme for [a] Specialist Force’, which centred on ‘a permanent amphibious Brigade to be found by the Royal Marines’. Such a force might not only ‘ensure greater continuity’ and provide for ‘more intensified training’ but it would ‘also ensure the availability of a striking force to deal with emergency situations short of war’.²⁷² However, the Committee ultimately rejected such a scheme for four reasons, which are notable not only because they shed light on comparisons with the American system and the US Marines, but also because most of them turned out to be accurate forecasts of future developments. The first was similar to the redundancy critique mentioned above, which simply noted that the ‘assault force must be ready to treat the assault phase merely as a preliminary to fighting a land battle’.²⁷³ The second resembled the reasoning behind why responsibility for amphibious development had to be independent, specifically by recognising that this ‘alternative scheme might unintentionally produce the result that the Services would regard [the permanent amphibious force’s] existence as absolving them from their obligation to maintain their own efficiency in this sphere’. Related to this was the third explanation, which centred on the report’s recommendation ‘for the permanent maintenance of an SS Group including Commandos’.²⁷⁴ Not only would the latter ‘make Divisional amphibious exercises realistic’ but they would also ‘provide a small but highly mobile force for Imperial defence’. Lastly, no matter what the case, the Committee ultimately doubted ‘whether landings will have to be made against a strongly defended coast’ anyway, which allowed for the ‘use [of] the nearest available Army formation’

²⁷¹ COS (44) 116, para. 23.

²⁷² COS (44) 116, para. 28.

²⁷³ Quoted in Speller, *Role*, 49; ‘Role’, 49.

²⁷⁴ ‘SS’ stands for ‘Special Service’.

as essentially a strategically mobile reserve force.²⁷⁵ As will be seen, whilst there were certainly a few unforeseen instances where a ‘permanent amphibious Brigade’ of Royal Marines would have been extremely useful, the overall line of thinking expressed by the Committee seemed not only to be quite insightful for having been reached in 1944, but also quite flexible in that the recommended scheme eventually still permitted the establishment of what was essentially a hybrid (or joint) version of this ‘amphibious force’ by the 1960s.

This flexible foundation, in fact, stemmed from the Committee’s conclusions and recommendations relating to the so-called ‘operational’ aspects, as mentioned above. Following along from having the Services ‘provide the assault forces’, the report noted that

‘[e]ffective combined training in peace can only be assured if there are available *certain specialist units* under the control of the CCO and a *permanent Naval assault force* under Admiralty control but available to CCO during the training season.... On this basis, *one Army division* could be trained annually’.²⁷⁶

Whilst this obviously involved all three Services, the Committee deliberately expanded on the responsibility of the Royal Marines, noting specifically that they ‘should find the greater part of the specialists to be maintained under CCO’s control’.²⁷⁷ Of the five ‘requirements’ that were recommended to be maintained ‘in peace in addition to the Central Organisation’, the two largest—the ‘*Special Service Group* (consisting of Commandos and Small Operations Group)’ and ‘*Beach Group Components*’—were to be staffed mostly by Royal Marines. A total of 900 Marines were recommended for ‘Two Commandos’ whilst 2,723 Marines were suggested for the ‘*Beach Group Organisation*’, which consisted of a ‘Beach Sub-Area and two Beach Groups’.²⁷⁸

The conclusions of the RAW Committee’s report were debated by the COS in July,²⁷⁹ after which the Admiralty submitted a paper with its disagreements. Whilst generally agreeing with the specific conclusions reached concerning the Royal Marines, the Admiralty generally believed ‘that the present system is not the best that it is possible to evolve, and do not agree that it should be perpetuated in its present form’, although it simultaneously announced that no

²⁷⁵ COS (44) 116, para. 28(a-d).

²⁷⁶ COS (44) 116, para. 39(g); (para. 3(g) in cover letter). Emphasis added.

²⁷⁷ COS (44) 116, para. 39(h); (para. 3(h) in cover letter). See also paras. 33-34.

²⁷⁸ COS (44) 116, Appendices C & D.

²⁷⁹ ___, ‘Extract from COS (44) 226 Mtg dated 7.7.44’ (DEFE 2/1262, folio 10; NA).

changes were required at that time.²⁸⁰ This was followed up by a paper by the CCO, who reiterated some of his initial fears that had been characteristic of the inter-war years, primarily by doubting that ‘an Inter-Service Committee...would be able to watch the interests of amphibious preparations as impartially as an independent organisation’. Whilst taking pains not to impugn the Services’ ‘past assistance and co-operation’, the CCO nevertheless concluded that ‘it would be demanding a Utopian degree of impartiality if we adopted a system which, if it is to work, relies on the voluntary acceptance of considerable sacrifices and inconveniences by an individual Service for the good of a combined technique’.²⁸¹

The Chiefs of Staff ultimately approved the conclusions of the so-called ‘RAW Committee’ and passed them on to the Prime Minister in a summary letter on 31 August 1944.²⁸² This contained a revised directive for the CCO, also approved by the COS, which empowered him to coordinate amphibious warfare doctrine development and peacetime practice (*i.e.*, training).²⁸³ With this approval, the British were set to maintain a combined operations establishment in the post-war era that was inherently joint, not only in headquarters and training establishment staffing but also in actual force structure. Although the COHQ establishment was repeatedly put under pressure by the Admiralty, once in 1947²⁸⁴ and again in 1950,²⁸⁵ the latter as a result of another organisational examination by the so-called ‘Long Committee’,²⁸⁶ the underlying rationale for its independence, joint organisation and broad function were repeatedly re-affirmed, at least into early 1950.²⁸⁷

As a matter of fact, not only was the ‘central organisation’ retained intact but so too was the training and establishment that had evolved by then. This included the jointly-staffed School

²⁸⁰ COS (44) 132, 22.7.44 (CAB 80/44; DEFE 2/1262, folio 11; NA), 1-2.

²⁸¹ COS (44) 133, 24.7.44 (CAB 80/44; DEFE 2/1262, folio 12; NA), 1-2. Quoted by Speller in *Role*, 53; ‘Role’, 52.

²⁸² COS (44) 157, 31.8.44 (CAB 80/44; DEFE 2/846, Docket CR 3289/44; DEFE 2/1262, folio 18; NA). See also COS (44) 167, 1.9.44 (CAB 80/45; DEFE 2/846, Docket CR 3289/44; NA).

²⁸³ COS (44) 168, 2.9.44 (DEFE 2/710; NA).

²⁸⁴ COS (47) 55 (O), 14.3.47 (DEFE 2/1647, folio 10; NA).

²⁸⁵ See COS (47) 55 (O), 14.3.47 (DEFE 2/1647, folio 10; NA); ___, ‘Extract from COS (49) 182 Mtg. dated 8 Dec 1949’ (DEFE 2/1441, folio 22; NA); and COS (50) 87, 9.3.50 (DEFE 2/710; DEFE 5/20; NA).

²⁸⁶ COS (49) 336, 11.10.49 (DEFE 2/710; DEFE 5/17; DEFE 2/1441, folio 8; DEFE 7/2280, folio 2; NA).

²⁸⁷ See COS (49) 353, 21.10.49 (DEFE 2/710; DEFE 5/17; DEFE 2/1441, folio 10; NA); COS (49) 366, 29.10.49 (DEFE 2/710; DEFE 2/1441, folio 13; NA); and ___, ‘Extract from COS (50) 47 Mtg of 22 March 1950’ (DEFE 2/1442, folio 12; NA).

of Combined Operations (SCO), a similarly-structured Combined Signal School (CSS), and the Combined Operations Experimental Establishment (COXE).²⁸⁸ By 1949, these components, which had all been moved to Fremington, North Devon, and now included a Combined Operations Bombardment Battery (COBB), were re-christened as the Combined Operations Centre (COC).²⁸⁹ It should be noted that an Amphibious School, Royal Marines (ASRM) had also been formed (in 1948). Consisting of three ‘wings’ (Minor Landing Craft, Beach, and Small Raids) that had consolidated a number of skeleton specialist units, such as the Landing Craft Obstacle Clearance Unit (LCOCU) and the Landing Craft Recovery Unit (LCRU), this school focused on landing craft operations and training as opposed to amphibious warfare *per se*, and therefore remained fundamentally separate from the COC.²⁹⁰

Overall, this inter-service approach was very different from the American system that was dominated by the Department of the Navy. However, like the US Army, which had just begun to make limited inroads into this apparent monopoly with respect to the larger-scale amphibious warfare operations, the Royal Marines had also started to establish their claim, although by staking out responsibilities for smaller-scale amphibious warfare enterprises, or raids.

TACTICAL ASPECTS OF ‘COMBINED OPERATIONS’

During World War II, American amphibious warfare operations fell into two general categories, the result of having to fight in two (if not three) theatres. The first involved small- and medium-scale amphibious assaults by naval (amphibious) forces to seize heavily-defended islands for use as naval and/or air bases (*i.e.*, as limited objectives) as part of a larger naval campaign in the Pacific Ocean. The second consisted mainly of large-scale amphibious expeditions by joint army, navy and air (including airborne) forces to invade major land masses

²⁸⁸ See various correspondence (DEFE 2/1315, Docket No. CR 251/45, Folios 16, 34, 37, 40, 45, 46; NA); COS (45) 299, 24.11.45 (CAB 80/51; NA); and additional correspondence (DEFE 2/1316, Docket No. CO 251/45 (Pt. II), Folios 77, 104, 112, 115; NA).

²⁸⁹ COC, ‘Combined Operations Centre – Organisation and General Staff Standing Orders’, 5.49 (DEFE 2/1708, Docket No. CO 1613/50, Folio 4; NA).

²⁹⁰ See various correspondence (DEFE 2/1619, Docket No. CO 793/48, Folios 4, 5, 6/8; Docket CO 793/18, folios 1A, 13A, 19, 28; NA); and CAFO 295, 29.10.48 (DEFE 2/1619, Docket CO 793/18, folio 31; NA).

as the initiatory phase of a larger (unlimited) land campaign, primarily on the African and European continents.

As discussed above, British amphibious/expeditionary warfare development between 1945 and 1950 was generally based on the latter type of endeavour. At the same time, considerable attention was also directed towards other forms of ‘combined operations’, most notably raiding, beginning seriously in 1947. There was also an effort begun to examine and prepare for ‘beach maintenance’-type operations, such as re-supplying or withdrawing armies over beaches and even re-supplying the homeland using amphibious methods,²⁹¹ although these were more fully developed in the early and mid-1950s.

As the post-war strategic situation unfolded in the late 1940s, it became increasingly apparent that, in case of a future war against the Soviets in Europe, the chances were high that the same set of strategic circumstances would evolve on the outbreak of a future war as they had at the beginning of World War II. Similarly, whilst this scenario seemed to require an eventual expeditionary invasion similar to that of Operation NEPTUNE, it also appeared to necessitate the employment of amphibious raids against a hostile continental shoreline. As a result, this subject gradually gained attention in COHQ with the Royal Marine Commandos beginning to take centre stage in this regard.

Combined Operations’ Doctrine (and Concepts) at the End of World War II

Unlike the Americans, who waited to collate the war’s ‘lessons learned’ into completely new doctrinal publications *after* the war, the British began to produce revised (and new) editions of their existing Combined Operations Pamphlets (COPs) in preparation for the war in the Pacific. These publications had been promulgated ‘specifically to deal with the responsibilities of all three Services in such operations’ and to augment the 1938 *Manual of Combined Operations*.²⁹² The capstone volume, COP No. 1, *Combined Operations (General)*, was printed

²⁹¹ See, for example, Speller, *Role*, 87-88; ‘Role’, 88.

²⁹² COHQ, COP No. 1, *General*, 9.42 (DEFE 2/724; NA), 1.

in May 1945 and replaced the 1942 edition.²⁹³ While not containing an official definition *per se*, this manual provided a general description of a ‘combined operation’, which reflected the evolution of the *expeditionary* nature of the concepts and doctrine under development since the inter-war years (and even earlier), and as promulgated in the 1938 *Manual of Combined Operations* as well as in the 1942 edition of COP No. 1.²⁹⁴

A Combined Operation seeks to establish forces on enemy territory by a sea-borne expedition protected and supported by naval and air forces. It may be made in conjunction with an airborne assault.... In operations of this kind the military formations carrying out the assault landing act as a covering force for the landing of the main body of the expedition.²⁹⁵

What differentiated this edition from its 1942 predecessor, however, was the identification of ‘two main types’ of ‘amphibious assaults’—‘short-range’ and ‘long-range’—with the primary variances being that the former relied on land-based air support while the latter relied on carrier-based air support. In the latter scenario, the force was also more self-contained and self-supported, particularly from a logistics standpoint.²⁹⁶

With this differentiation, COP No. 1 referred to a new manual, COP No. 21, *Conduct of a Long Range Assault in the Far East*, which was essentially a secondary capstone manual to a new series being specifically promulgated for long-range combined (amphibious) operations.²⁹⁷ As this Pamphlet stated, these ‘special publications’ were produced to identify and describe the specific characteristics of the Pacific theatre—such as ‘terrain and hydrography’ and ‘weather and climate’—which were different from those in Europe and would therefore require different techniques and equipment to be used, such as the LVT, LCVP and LVT(A).²⁹⁸

Although raids were only briefly recognized in the 1945 edition of COP No. 1, COP No. 21 referenced two additional publications which covered this type of endeavour.²⁹⁹ These were COP No. 26, *Commandos in the Field*, and COP No. 28, *Small-Scale Amphibious Raids*, which

²⁹³ The publication of COP No. 1 was approved on 6.4.45. See ___, ‘Minutes of the 26th Mtg. of the Executive...4th April 1945’, 6.4.45 (DEFE 2/1183, Docket CR 712/45; NA). See also COHQ (CCO), COP No. 1, *Combined Operations (General)*, 5.45 (DEFE 2/725; NA).

²⁹⁴ ___, *Manual of Combined Operations*, 1938 (DEFE 2/709; NA), 17; COP No. 1, 9.42 (DEFE 2/724; NA), 6.

²⁹⁵ COP No. 1, 5.45, 11.

²⁹⁶ COP No. 1, 5.45, 12-13.

²⁹⁷ COHQ (CCO), COP No. 21, *Conduct of A Long Range Assault in the Far East*, 5.45 (DEFE 2/725; NA).

²⁹⁸ COP No. 21, 5.

²⁹⁹ COP No. 21, especially 3-7.

had been promulgated in March and May 1945, respectively.³⁰⁰ The former, however, was almost exclusively concerned with how commandos were employed in *major* assaults. Due to their light weaponry, the Commandos sought surprise and agility over firepower, preferred operating in darkness and on the flanks, and were specially trained not only to negotiate difficult obstacles (*i.e.*, rocky beaches and cliffs) but also to handle minor landing craft. As such, their prime objectives included attacking isolated defensive positions (including flanks), infiltrating rapidly inland from the beachhead, making independent subsidiary assaults with or after the main assault, and creating diversions.³⁰¹ Not much more detail was provided in COP No. 28 as it only provided a very general definition of a raid, referring to it as ‘a temporary lodgment on the enemy coast by parties landed and withdrawn by sea’.³⁰²

Future Warfare, Atomic Weapons and Combined Operations

Future Warfare and ‘Combined Operations’

Like their investigations into post-war defence (re-)organisation, the British also began to examine future warfare—including combined operations—prior to the cessation of hostilities, even in Europe. As early as November of 1944, only a few months after Operation NEPTUNE, the COS directed the Joint Technical Warfare Committee (TWC) ‘to carry out an investigation into the future potentialities of weapons of war...’,³⁰³ an effort for which Sir Henry Tizard was selected to head.³⁰⁴

The Tizard Committee’s first report was issued on 16 June 1945, exactly one month prior to the experimental detonation of the first atomic bomb in America.³⁰⁵ Although it could therefore only theorise abstractly about the future potential of ‘the release of atomic energy’, one of its conclusions seemed to reaffirm the continuing importance of expeditionary warfare,

³⁰⁰ COHQ (CCO), COP No. 26, *Commandos in the Field*, 3.45; and COHQ (CCO), COP No. 28, *Small Scale Amphibious Raids*, 5.45 (DEFE 2/725; NA).

³⁰¹ COP No. 26, 3-10.

³⁰² COP No. 28, 5.

³⁰³ TWC (44) 68, 8.11.44 (DEFE 2/1251, Docket 366-47 (Pt. I), Folio 1; NA).

³⁰⁴ —, ‘Extract from TWC (44) 24th Mtg. dated 14 Nov 44’ (DEFE 2/1251, Docket 366-47, Pt. I, Folio 2; NA).

³⁰⁵ COS (45) 402 (O), 16.6.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 31; NA).

although the ambiguous use of the term ‘combined operations’, at least in this particular case, made it unclear whether simple joint air/sea or amphibious operations were being emphasised.

It will be seen that there are great changes ahead. These may be assumed by some to support the extreme view that the supreme importance of the Navy is giving way to that of the Air. We wish to record our view that though this may happen in the distant future, it will not be in our life-time. The need is no longer to concentrate mainly on the defeat of surface forces by surface forces, but primarily to counter the threat from the air and from under the water. Most thought should therefore be given to the defeat of the air and submarine menace and to participation in combined operations. The Navy alone is no longer our sure defence and the scientific development that we foresee forces us to the conclusion that air and sea war are indivisible.³⁰⁶

Atomic Weapons and ‘Combined Operations’

Unsurprisingly perhaps, initial reaction (or over-reaction) to the atomic bomb was almost immediate. On the one hand were negative comments that came directly from various sources within the COHQ establishment. These ranged from a call to ‘put all of our present ideas and all our papers on the future of ships, etc. that we are now writing, into the waste paper basket’³⁰⁷ to an even more despondent claim that ‘[a]ll modern methods of warfare will be obsolete in a few years and that there will be no point in large fleets, bombers or large armies’.³⁰⁸ On the other hand were questions, ironically from some of the same sources, about the potential of using atomic weapons in an *offensive* capacity in combined operations. One such inquiry concerned using the atomic bomb by ‘dropping it at an appropriate distance out to sea so that the resulting disturbance in the water will have the indirect effect of a tidal wave, swamping the opponents[’] defences and thus aiding the subsequent amphibious assault’.³⁰⁹ Subsequent questions included how long areas affected by atomic bombs would remain impassable and whether or not atomic mines could be used to defend against seaborne landings.³¹⁰ These were quickly put into a paper submitted to the TWC for further analysis.³¹¹

³⁰⁶ COS (45) 402 (O), 3-15.

³⁰⁷ DCO(Air) ltr to distr., 8.8.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 33; NA).

³⁰⁸ DXOR ltr to CCO and DCO(N), 13.9.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 45; NA).

³⁰⁹ DCO(Air) brief to CCO, 13.9.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 42; NA).

³¹⁰ Captain, RN (for CCO) ltr to Secretary, JTWC, 18.10.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 48; NA)

³¹¹ TWC (45) 37, 20.10.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 50; NA).

Generally speaking, the TWC eventually came to conclude that the future did not look quite so bleak with respect to the possible employment of atomic weapons in future wars.³¹² This was not the case initially as a preliminary report issued on 24 October 1945 stated that ‘[i]nvasions by sea would not be possible’ if atomic bombs were used in a future war.³¹³ In another report released the following January, the TWC seemed to have resigned itself to the fact that atomic bombs would most likely be employed in a future war.³¹⁴ This, in turn, convinced the joint committee to recommend specific counter-measures, most notably the general use of ‘dispersion’, although it also emphasised the apparent limitations of atomic weapon use in any circumstance in a future war, mainly due to their limited number and, therefore, their extremely high value.³¹⁵

Whilst this stance seemed to mirror the American view regarding the vulnerability of concentrated naval and ground forces to atomic weapons, there was a slightly unique aspect of concern for the British that stemmed from the specific amphibious nature of conducting large-scale ‘combined operations’ on a continental coast.

Base areas as we know them at present, with large depots and installations dependent for their operation on low grade troops and frequently on ‘coolie’ labour, are exceptionally vulnerable to attack by atomic bombs. In particular an invading Army cannot in future be allowed to depend for its supply on two or three large ports. Our strategic conception as to the mounting and subsequent maintenance of any military campaign will require revision in light of these factors in the future.³¹⁶

While this vulnerability was most apparent once beachheads had been seized and port bases captured overseas in order to maintain expeditionary armies and air forces, it would increasingly become an issue with regard to the *mounting* of these endeavours from *home* ports. Indeed, this ultimately translated into a potential threat to the survival of the country itself as the British Isles were dependent upon sea lines of communications and, by extension, the ports of call that anchored them. These realisations led to an increase in developing certain aspects related to

³¹² ACNS(W) ltr to Distr., 15.8.45 (ADM 1/17259: Docket Adm 132/45 or TSD 368/45; NA).

³¹³ TWC (45) 38, 24.10.45 (DEFE 2/1251, Docket 366-47, Pt. I, Folio 51; NA).

³¹⁴ TWC (46) 3 (Revised), 30.1.46 (DEFE 2/1251, Docket 366-47, Pt. II, Folio 69; NA).

³¹⁵ TWC (46) 3 (Revised), 11.

³¹⁶ TWC (46) 3 (Revised), 11.

amphibious warfare concerned with the establishment of the beachhead, specifically the transport of supplies over beaches (instead of ports).³¹⁷

Tizard's final revised report was released in July 1946.³¹⁸ One of its main conclusions was that the same conditions were necessary for 'successful amphibious operations or independent airborne operations', which revolved around 'air and sea superiority sufficient to ensure continuity of supply and build-up'. While the report continued by recognising the primacy of air power in future war, especially with atomic weapons, it also reiterated the vulnerability of bases, stating that the 'with the existence of but a few atomic bombs it is clear that the main bases, at least in the United Kingdom, for the use of both naval and merchant shipping can no longer be regarded as secure'. With such an ominous conclusion, *offensive* combined operations seemed to have been by-passed almost completely.³¹⁹

In sum, the report failed to arrive at any specific assessment of future combined operations, which was quite ironic on two counts. Most apparent was the inherent requirement for offensive combined expeditionary operations to re-enter the European continent eventually in the offensive stage of a long war. Less obvious, but perhaps more immediately significant, was the need for other types of 'beach organisation'-type enterprises, including the re-supply of expeditionary armies over beaches (and through ports eventually), the conduct of combined operations 'in reverse' (*i.e.*, 'withdrawals') to evacuate armies from hostile shores, and even the emergency re-supply of Great Britain itself in cases where home ports were damaged or destroyed in an atomic attack.

The Early Post-War 'Study' and Practice of 'Combined Operations'

Although serious investigation into the potential effects of atomic weapons had been made with regard to warfare in general and combined (amphibious) operations in particular, the impact of the resulting conclusions did not seem to be as significant as those that had affected American amphibious warfare development, specifically with regard to the US Marine Corps'

³¹⁷ TWC (46) 3 (Revised), 11.

³¹⁸ TWC (46) 15 (Revised), 1.7.46 (DEFE 2/1251, Docket 366-47, Pt. II, Folio 99; NA), 1-6.

³¹⁹ TWC (46) 15 (Revised), 13.

conception of amphibious ‘vertical envelopment’. Instead, the British began the post-war era by focusing primarily on their wartime experience with large-scale amphibious landings, which carried over after the war. This was done primarily through such theoretical investigations as ‘The Study’ as well as ‘command post’-type exercises as SPEARHEAD,³²⁰ which were undertaken mostly because of the lack of manpower and funds necessary to conduct operational tests and exercises.

Development of ‘The Study’ (and Doctrine)

As the (re-)evaluation of the Technical Warfare Committee’s report continued through 1945, the CCO began to formulate a plan to perform an investigation specifically concentrated on combined operations. In early February 1946, COHQ finally outlined what would become known as the ‘Study of the Conduct of Future Combined Operations’, or simply, ‘The Study’. This was to be ‘a detailed examination of the technique for a combined operation after studying the methods and equipment used by all nations during the recent war’ with the ultimate object being for the CCO ‘to make proposals to the Chiefs of Staff on the future conduct of combined operations and the equipment required for them’.³²¹ It was to be divided into two parts, a short term (of five years—to 1951) and a long term (of ten years—to 1956) and was ‘to cover both those combined operations which depend broadly upon surprise and those which depend broadly upon bombardment’ (as well as short- and long-range enterprises), which acknowledged that the European and Pacific wartime techniques were different enough to require separate analyses. Other assumptions included going up against first-class defences, the availability of airborne divisions, and sufficient flexibility so that any number of divisions could pass through the landing beach,³²² although the landing force was subsequently limited to ‘one Corps of not more than four divisions, assaulting with two Divisions up, with the usual additional troops’.³²³

³²⁰ These areas are also covered by Speller, primarily in *Role*, 66-69, and ‘Role’, 59-61.

³²¹ Secretary, AWC (COHQ) ltr to Distr., 7.2.46 (DEFE 2/1727: Docket No. CR 66/46, Folio 3; NA), 1.

³²² Secretary, AWC (COHQ) ltr, 1-2.

³²³ [Secretary, AWC (COHQ) ltr to Distr.], 21.3.46 (DEFE 2/1727, Docket No. CR 66/46, Folio 16; NA), 1-2.

Over the course of the next several months, ‘The Study’ experienced a number of delays due to the addition of various reports, analyses, and raw data.³²⁴ Contrary to the understanding that this project had been completed in 1946,³²⁵ COHQ Executive meetings held in mid-1947 indicated that the analysis was still being drafted more than a year after its original inception. By that time, twelve final draft ‘chapters’ had been approved with three still ‘under revision’. More significantly, the purpose of ‘The Study’ had been reaffirmed: ‘to define the doctrine of Combined Operations for the immediate future’ and to ‘be the basis on which Combined Operations publications and handbooks should be written’.³²⁶

Additional chapters as well as revisions were approved in September and October of 1947.³²⁷ A ‘Main Study, 1947’ was also mentioned in March, 1948, albeit without any detail. At the same time, a future doctrinal publication, the *Manual of Combined Operations*, was outlined as having six Parts. In addition, a new series of Combined Operations Handbooks (COHBs) were to replace the COPs of World War II. While these were to range from a ‘Planning’ sub-series (Nos. 1a to 1d) to a single volume on ‘Intelligence’ (No. 12a), they also included sub-series on ‘Naval Units’ (Nos. 3a to 3f), ‘Army Formations’ (Nos. 4a to 4e), ‘Air Forces’ (No. 8), and ‘Commando and Raid Technique’ (Nos. 10a to 10e).³²⁸ Unfortunately, it was estimated that it would take another six years to complete the process of replacing all of the outdated COPs with COHBs.³²⁹ Before then, a capstone doctrinal volume would be produced that summarised British amphibious and expeditionary warfare thinking, although it would not be promulgated until March 1950 (see below).

³²⁴ ___, ‘Minutes of a Special Mtg. of the Executive...17/4/46’, 25.4.46; and ___, ‘Minutes of the 21st Mtg of the Executive...31st May, 1946’, n.d. (DEFE 2/1724, Dockets CR 576/46 and CR 753/46; NA). See also Secretary, AWC (COHQ) ltr to Distr., 17.7.46; Secretary, AWC (COHQ) ltr to Distr., 24.7.46; CCO ltr to U-SS (WO), 18.10.46; Secretary, AWC, Brief for CCO, 28.11.46 (DEFE 2/1727, Docket No. CR 66/46, Folios 44, 48, 67, 77; NA).

³²⁵ See Speller, ‘Role’, 60.

³²⁶ ___, ‘Minutes of the 14th Mtg of the Executive...19th June, 1947’, n.d. (DEFE 2/1443, Docket CO 8(14)/47), folio 1; NA), 2-3. The original intention, as spelled out in September of 1946, was ‘that the tactics and technique propounded in the Main Study...be accepted as doctrine...’. See ___, ‘Extract of the Minutes of AWC(46)31 Meeting of the Amphibious Warfare Committee...18 September 1946’, n.d. (DEFE 2/1727, Docket No. CR 66/46, Folio 62A; NA).

³²⁷ ___, ‘Minutes of the 22nd Mtg...18th September, 1947’, n.d.; and ___, ‘Minutes of the 23rd Mtg. of the Executive...10th October, 1947’, n.d. (DEFE 2/1444, Docket CO 8(22)/47), folio 1; Docket CO 8(23)/47, folio 1; NA).

³²⁸ [COHQ], ‘Acquaint No. 128, Combined Operations Publications’, 19.3.48 (DEFE 2: Docket CO 477/47, Folio 41; NA), 1-4.

³²⁹ DCO(P) ltr to Chief of Staff, 29.4.48 (DEFE 2/1536, Docket CO 477/47, Folio 44; NA).

Exercise SPEARHEAD

While conceptual developments were proceeding apace, the same could not be said for practical developments, at least with regard to training and exercises. The first major post-war combined (*i.e.*, joint) exercise, which was strictly an ‘administrative’ (or ‘command post’) one, was conducted by the War Office in May of 1946 called EVOLUTION. As its primary purpose centred on studying ‘offensive land operations’, the exercise’s only element that was amphibious-related involved an ‘opposed crossing of a major river obstacle such as the Rhine’.³³⁰

Plans for a combined ‘Overseas Expedition’ exercise were announced in August 1946 for War Office Exercise SPEARHEAD to be held in May of 1947.³³¹ Although the initial strategic scenario was to involve all three Services mounting a joint enterprise from the UK in an attack on Italy,³³² it was changed to a two-corps operation with one corps being transported from the United Kingdom and the other being mounted from North Africa. As a ‘script’ for the exercise described, ‘the setting [was] largely based on the actual progress of the last war during the period 1939/42’ and ‘[m]uch of the data required for planning [was] in fact based on the action which took place at SALERNO in 1943’.³³³ The landing forces required amounted to two corps for the ‘Assault and Follow-up’ consisting of three infantry divisions, one armoured division, one airborne division and a Commando Brigade (*i.e.*, four commandos). An additional two corps were required for the subsequent ‘Build-Up’ phase consisting of four infantry divisions and one airborne division.³³⁴ Specific weight was placed on the ‘Airborne Troops’, which were to be used for the seizure of an airfield, although a quick link-up with the other forces was essential. Similarly, ‘Commandos’ were to be used to capture small islands leading to the objective so that the convoy would remain safe from raiding forays. Finally, tracked

³³⁰ DMT(WO) ltr to CCO, 30.4.46 (DEFE 2/1740, Docket No. CR 648/46, Folio 1; NA), 1.

³³¹ VCIGS note to DCIGS, 16.8.46. See also DMT ltr to Distr., 14.1.47; and CIGS ltr to CINC India, 29.1.47 (WO 216/202, Docket CIGS BM No. 26/1241, Folios 1, 1A, 14A; NA).

³³² CIGS ltr to Tizard, 31.1.47 (WO 216/202, Docket CIGS BM No. 26/1241, Folio 15A; NA), 1.

³³³ ___, ‘Script for Item One – Introduction to the Exercise’, 5.47, 1; and ___, ‘Script for Item Three – Opening Narrative’, [5.47] (WO 216/202; NA).

³³⁴ ___, ‘Script for Item Six – The Army Outline Plan, April 1949’, [5.47] (WO 216/202; NA), 1-4.

amphibian columns were to be landed ‘very early’ to link up with the airborne troops and penetrate inland as rapidly as possible.³³⁵

This obvious emphasis on the large-scale, European-style, “joint amphibious operation”—with all of its corresponding characteristics—was reinforced when another ‘script’ stated explicitly why the Pacific technique of conducting ‘amphibious operations’ during the Second World War was insufficient.

It will become clear, as we proceed, that we do not consider that the PACIFIC technique, that is, prolonged and continuous bombardment of the area selected for the landing over a period of days prior to the assault with the complete sacrifice of surprise, is acceptable in European conditions against a first class power with facilities for building up superior forces on shore if given time and unmistakeable indications of the point of attack. We have reached the conclusion that, under such conditions, it will be necessary to break down a long range invasion project into a series of short range operations so that the ultimate assault can be made with the maximum degree of tactical surprise and with the full support of land based air forces.³³⁶

Such an approach notwithstanding, it is interesting to note that for the purposes of the exercise—in which Germany was again the enemy—atomic weapons were assumed to be available and that Germany would likely have dropped two or three devices on the UK with serious ‘but not catastrophic’ results.³³⁷ These weapons, due to their limited existence, would only be used strategically and therefore played no role in the simulated invasion. This even held true for the ‘sea passage’ phase of the operation which would still revert to a ‘close convoy’ system so as to offer the most protection against what was considered to be the gravest threat—submarines, although ‘a dispersed cruising disposition must be available for adoption in the event of Intelligence suggesting that the threat from atom attack is greater than that from subs’. This also applied to the ship-to-shore and establishment of the beachhead during the assault landing.³³⁸

In addition, the actual effects of withstanding an atomic attack were studied in a separate analysis.³³⁹ Three situations were identified, including an attack on a convoy at sea, an attack on a convoy at anchor, and an attack on the actual landing craft during the ship-to-shore movement.

³³⁵ ‘Item Six’, 5-6.

³³⁶ ‘Item One’, 2.

³³⁷ ___, ‘Script for Item Two – Future Weapons and the Effect of their Introduction Into Exercise Spearhead’, [5.47] (WO 216/202; NA), 1.

³³⁸ ‘Item Two’, 2.

³³⁹ ___, ‘Estimated Effects of An Atomic Bomb Attack on a Combined Operation Landing’, [1947] (ADM 1/20373; NA), Annexure Six (Relating to Appendix XA of the Appreciation).

For the first two scenarios, an underwater burst was assumed, which would have resulted in significant (but apparently only limited) damage. For the third scenario, the report described a surface blast (at an optimal distance of 3,500 yards offshore) against a divisional attack frontage of 15 landing ships and 300 landing craft: ‘An attack with one bomb...sinks the boats carrying approximately one battalion and attached troops; the boats carrying a second battalion would be damaged, all on board receiving a lethal dose of radio activity as well as heavy immediate casualties. The boats carrying two other battalions would have casualties in varying degree’. With a conclusion that simply stated that ‘three well placed bombs would...wipe out the whole divisional landing operation’,³⁴⁰ the prediction that large-scale amphibious operations were most likely obsolescent in the face of nuclear weapons seemed to have preceded US General Omar Bradley’s much criticised statement by more than two years.

A special report that was put together by the Amphibious Warfare Committee (later Assault Warfare Committee) within COHQ outlined the various issues addressed by SPEARHEAD, how they related to current combined operations doctrine and practice, and what action was being taken by COHQ in relation to each.³⁴¹ While a variety of subjects were covered in detail, only a few bear mentioning as they represented the most significant characteristics of British combined (amphibious) operations, not only inherently but also relative to those characteristics adopted by the Americans, some of which were different (*i.e.*, as compared to the US Naval Service) and some of which were similar (*i.e.*, as compared to the US Army and, to a lesser extent, Air Force).

Amongst the most important concerned command relationships, which did not comport to the command system championed by the US Naval Service. Simply put, the British called for a supreme commander ‘on the highest level’ with ‘three Service Commanders-in-Chief...located together during the assault and...jointly responsible for the operation on the “trinity” system’.³⁴²

³⁴⁰ —, ‘Estimated Effects’, 1.

³⁴¹ [AWC], ‘Relation of Spearhead Final Report to Combined Operations Headquarters Policy’, [1947] (DEFE 2/1608, Docket No. CO 762-47, Folio 1; NA).

³⁴² ‘Relation’, 2.

As will be seen later, this seemed to conform most closely to the US Air Force's command arrangements during so-called 'joint amphibious operations' (or *expeditionary* operations).

Next was the 'Assault Technique' which, whilst notably lacking in any examination of naval gunfire and close air support (both of which bore heavy emphasis by the US Naval Service), included an analysis on the employment of airborne forces, which were considered to be 'valuable for pinning down enemy reserves remote from the assault area'. Indeed, not only would the employment of larger numbers of airlifted troops 'reduce the dangerous concentration of shipping in the assault area', it was even suggested that 'the whole assault should have been carried out by airborne troops...[although] the practical implications of this proposal were not discussed'.³⁴³

In conclusion, a determination was made that development of joint army/navy (*i.e.*, land-sea) and air force/army (*i.e.*, air-land) operations was 'at present quite different' and specifically 'a matter of high policy outside the scope of this paper'. Nevertheless, it was 'for consideration whether liaison is sufficiently close between the two organisations, who are each engaged on separate halves of the same problem'.³⁴⁴ Although the lack of action on this item ultimately still left COHQ responsible for the former type of joint operation (and the Air-Land Warfare Committee responsible for the latter type), the statement revealed the lack of an over-arching coordinating authority below the level of the Chiefs of Staff Committee that was responsible for ensuring that close liaison was maintained or even existed between these two vital entities. Indeed, as will be seen later, just such a coordinating authority—the Joint Warfare Committee (with its corresponding Joint Warfare Establishment)—would eventually be established in 1962 by essentially amalgamating COHQ and the aforementioned Air-Land Warfare Committee, which seemed to represent a bit of a triumph for an evolutionary process that had begun during the inter-war years and arguably came 'full-circle'.

³⁴³ 'Relation', 13.

³⁴⁴ 'Relation', 13.

As the Americans were just beginning to conceptualise the use of helicopters (and seaplanes) seriously, mention should be made here of the apparent lack of analysis on the same subjects by the British.³⁴⁵ The British, in fact, began investigating using a ‘large seaplane for the introduction or withdrawal of raiding forces in the Far East’ as early as April of 1945,³⁴⁶ although no requirement was foreseen at that time.³⁴⁷ In addition, in June of that year, a report on the ‘Study of the Potential Application of the Helicopter to Various Army Roles’ was released which traced the evolution of British helicopter experimentation, which had ceased in 1940 but had then resumed in 1943 with the Royal Navy and Royal Air Force conducting trials with 40 US-made Sikorski R4s between 1944 and 1945.³⁴⁸

Although this report was supported within COHQ³⁴⁹ and had prompted the CCO to call for the need for three types of helicopters—not including a troop carrier—initially,³⁵⁰ any permanent helicopter development program was already facing serious challenges, most notably by the termination of the American ‘Lend-Lease’ program which made it impossible to maintain the American-made helicopters already in use in the UK. As a result, only the light helicopter was to be developed initially in the short term by the Royal Air Force.³⁵¹ The Royal Navy concluded that it did not have any requirement for helicopters since they doubted whether the helicopters would even be economical in a combined operation.³⁵²

Despite these setbacks, COHQ proceeded to investigate the potential employment of helicopters in combined operations, although nothing was published until April of 1948 with little (conceptual) progress seemingly having been made.³⁵³ Not only did severe financial constraints continue to retard equipment development and procurement in general but the role of

³⁴⁵ There was actually one mention of possibly using helicopters ‘as a supplement to the ferry service’ in one of the SPEARHEAD Exercise reports. See [AWC], ‘Relation’, 14.

³⁴⁶ ___, ‘Minutes of the 28th Mtg. of the Executive...18.4.45’, 20.4.45 (DEFE 2/1183, Docket CR 871/45; NA).

³⁴⁷ ___, ‘Minutes of the 29th Mtg. of the Executive...25.4.45’, 27.4.45 (DEFE 2/1183, Docket CR 958/45; NA).

³⁴⁸ Director of Air, WO, ltr to Distr., 22.6.45; Director of Air, WO, ltr to Distr., 11.9.45; DCO (Air) ltr to Distr., 2.11.45; and ___, ‘A Note on Helicopters’, n.d. (DEFE 2/1697, Docket CR 1479/45, folios 1, 2, 6; NA).

³⁴⁹ ___, ‘61st Mtg of the Executive’, 8.11.45’ (DEFE 2/1299, Docket CR 2902/45; NA).

³⁵⁰ CCO Ltr to Secretary of the Admiralty, U-SS, WO, and U-SS, Air Ministry, 8.11.45 (DEFE 2/1697, Docket CR 1479/45, folio 7; NA).

³⁵¹ ACIGS (Weapons) ltr to COHQ, 15.11.45; Air Commodore [DOR] ltr to COHQ, 6.12.45; (DEFE 2/1697, Docket CR 1479/45, folios 8, 9; NA).

³⁵² Secretary of the Admiralty ltr to CCO, 14.5.46 (DEFE 2/1697, Docket CR 1479/45, folio 10; NA).

³⁵³ DCO(P) ltr to Executive, 9.4.48 (DEFE 2/1697, Docket No. CO 855/48, folio 3; NA).

the helicopter itself was also restricted to cargo carrying and communications (as part of a ferrying service) rather than tactical troop carrying in an assault. The report nevertheless foresaw a three-ton capacity, multi-rotor helicopter as being the future load carrying transport which, when properly fitted with the appropriate winches and slings (and the cargoes palletised accordingly), would offer a rapid method of carrying cargoes directly from ship to shore. The problem of transporting enough of these flying machines to the assault area was to be alleviated through the use of either an aircraft carrier or a different ship specially converted for this purpose.³⁵⁴ In the end, however, the COHQ Executive did not find this concept attractive, claiming instead that ‘such an operation could not be regarded as a feasible proposition within the foreseeable future’.³⁵⁵

New ‘Combined Operations’ Concepts and the Royal Marines

Small Scale Raiding and Unorthodox Operations

Whilst British attention to post-war ‘combined operations’ focused primarily on the development of large-scale ‘invasion’-type expeditionary operations between 1945 and 1950, interest in raiding resurfaced during that period due to the similar geo-strategic situation that Great Britain faced in the case of a third world war with the Soviet Union. Preliminary papers and correspondence produced by COHQ initiated an examination of the ‘Division of Responsibility for Small Scale Raiding’ as early as February 1947. A number of issues were presented, beginning with the definition of a raid, which encompassed ‘any independent operation into enemy-held territory carried out by a party of uniformed troops not more than 30 strong’.³⁵⁶

After receiving some feedback on his various proposals, the CCO called for an Inter-Service meeting to be held in June to discuss the division of responsibility for what was now

³⁵⁴ DCO(P) ltr to Executive, 1-2.

³⁵⁵ ___, ‘Minutes of the 13th Mtg of the Executive...22nd April, 1948’, n.d. (DEFE 2: Piece 1609, Docket No. 768/1/48, folio 13; NA). Quoted by Speller in *Role*, 167; ‘Role’, 107.

³⁵⁶ AWC, ltr to Distr., 6.2.47; COHQ ltr to Secretary of the Admiralty, U-SS, WO, and U-SS, Air Ministry, 12.3.47 (DEFE 2/1449, Docket No. CO 27/47, Folios 2, 5; NA); and COHQ, ‘The Division of Responsibility for Small Scale Raiding Within the Combined Operations Command (including Commando Group)’, 5.2.47; [COHQ], ‘Proposals for Combined Operations Small Scale Raiding Policy [Draft]’, [3.47] (DEFE 2/2088, Docket No. 27A/47, Folio 2, and Docket No. CO 27B/47, Folio 1; NA).

being termed ‘Unorthodox Operations’, which included both ‘Raids’ and ‘Clandestine Operations’. Amongst the myriad of proposals to be considered, the most important involved the establishment of a permanent inter-service committee that would maintain the necessary close liaison amongst the Services (and COHQ), which had been lacking during the recent war. The CCO was to be chairman while one member each was to come from the Admiralty, the War Office, the Air Ministry, Special Operations and COHQ.³⁵⁷

The CCO’s inter-service meeting was held on 27 June 1947 at COHQ where the CCO’s suggestions were generally agreed, including the creation of ‘a permanent Inter-Service Committee’ along the same lines as the inter-service meeting itself with the permanent addition of a Royal Marine. The main function of this Committee was to ‘formulate a joint policy on all matters relating to raiding and clandestine operations’, to ‘investigate and make recommendations through COHQ to the Chiefs of Staff Committee’ on matters relating to this policy, and to ‘appoint special sub-committees as...necessary’.³⁵⁸

The main thrust of these items were summarised by the CCO in a document that was produced for the Chiefs of Staff in August, requesting approval for the establishment of the permanent Inter-Service Committee on Raiding Operations (ISCRO).³⁵⁹ For various reasons, it was not approved until April of 1948.³⁶⁰ The CCO informed the three Services of this in May³⁶¹ and the first meeting of the ISCRO was finally held on 16 June. Eight types of raids were confirmed, ranging from simple ‘offensive’ and ‘deceptive’ raids, to ‘operating a concealed Advanced Base’ and the ‘transportation of “clandestine operators” and their stores’. The Committee’s participants also agreed to establish three sub-committees, one to address the

³⁵⁷ Commander, Commando Group, ltr to CCO, 29.4.47; and Cmdt. (SCO), ltr to CCO, 14.5.47 (DEFE 2/2088, Docket No. CO 27B/47, Folios 4, 5; NA); and ___, ‘Extract of the Minutes of AWSC(47)14th Mtg...30 May 1947’, n.d.; CCO ltr to Secretary of the Admiralty, U-SS, WO, and U-SS, Air Ministry, 6.6.47 (DEFE 2/1449, Docket No. CO 27/47, Folios 13, 17; NA).

³⁵⁸ ___, ‘Minutes of the Meeting...27th June 1947...’, [1.7.47] (DEFE 2/1449, Docket No. CO 27/47, Folio 29; NA).

³⁵⁹ COS (47) 93, 7.8.47 (DEFE 5/2; NA); and COHQ ltr to Secretary, COS Committee, 1.7.47 (DEFE 2/1449, Docket No. CO 27/47, Folio 37; NA).

³⁶⁰ ___, ‘Extract from COS (48) 47th Mtg of 2.4.48’, n.d. (DEFE 2/2089, Docket No. CO(O) 27/47, folio 1C; NA).

³⁶¹ COCOS ltr to Under Secretary of the Admiralty, U-SS, WO, and U-SS, Air Ministry, 26.5.48 (DEFE 2/2089, Docket No. CO(O) 27/47, folio 1; NA).

division of more detailed responsibilities for raiding in general, another to examine responsibilities for ‘technique and training’, and the last to address equipment development.³⁶²

Whilst these sub-committees began to meet and address their respective issues with regard to raiding,³⁶³ the newly renamed Chief of Combined Operations Staff (COCOS) forwarded a summary document to the Commandant of the SCO on 27 July 1948, which detailed the changed policy situation that had evolved within the new strategic context. It stated that although the British study of combined operations since World War II had almost exclusively revolved around the large-scale, Normandy-type of enterprise, it was now recognised that such operations were *not* likely in the first two years of a future war. Therefore, other variations had to be investigated, specifically corresponding to the ‘period’ of war during which each was expected. Of the three sequential ‘periods’ listed—‘peace or pre-war’, ‘strategic defensive’, and ‘offensive’—COHQ was focusing more on the second (instead of the third), not only because of the limited resources available, which effectively precluded any large-scale operations from being undertaken at the outset, but also because the UK would have to rely heavily on the US anyways—as it had during the recent war—particularly for specialised assault shipping. The types of operation that were expected during the ‘strategic-defensive’ phase included the seizure of a limited objective, the clearance of a small bridgehead, a rapid re-embarkation, raids, emergency maintenance over beaches, and specialised amphibious operations such as riverine warfare.³⁶⁴

Follow up reports to the first ISCRO meeting were considered in the subsequent months and on 30 November 1948 the COCOS summarised the various findings and made recommendations to the three Services.³⁶⁵ This paper and another one produced by COCOS for

³⁶² ___, ‘Minutes of the 1st Mtg of the Inter-Service Committee on Raiding Operations...16th June, 1948’, n.d. (DEFE 2/2089, Docket No. CO(O) 27/47, folio 10; NA).

³⁶³ COCOS ltr to Secretary of the Admiralty, U-SS, WO (DMO), U-SS, WO, U-SS, Air Ministry, and CGRM, 10.8.47 (DEFE 2/2089, Docket No. CO(O) 27/47, folio 20; NA).

³⁶⁴ COCOS note to Cmdt., SCO, 27.7.48 (DEFE 2/1676, Docket No. CO 1039/48, Folio 22; NA).

³⁶⁵ SO (Plans) [and MX (RASC)], 15.11.48; ___, ‘Extract of the Minutes of 33rd Mtg of the Executive...16 November 1948’, n.d.; and ___, ‘Extract of the Minutes of the 34th Mtg of the Executive...23 November 1948’, n.d.; COHQ ltr to Secretary of the Admiralty, U-SS, War Office (DMO), U-SS, War Office (SD6), U-SS, Air Ministry (DCAS), and CGRM, 30.11.48; (DEFE 2/2089, Docket No. CO(O) 27/47, Folios 31, 32, 34, 36; NA).

CGRM, which detailed the 'Formation of a Small Raids Unit', were considered at the second meeting of raiding Committee, held on 5 January 1949.³⁶⁶ While the need to raise a fourth Commando (in the UK) and establish a Small Raids Unit (SRU) were agreed to in principle, it was noted that due to 'shortages in manpower' only a 'nucleus' of such a Unit could be formed. In addition, the Committee agreed to produce an updated draft of the 'Raiding' paper for submission to the Chiefs of Staff although this did not take place until 5 April.³⁶⁷

Raiding and the Royal Marines

Prior to this, the COS had met in early January to discuss a memorandum by the Admiralty on the roles of Royal Marines in peace and war, which seemed to parallel the requirements being outlined by the Raiding Committee. The memorandum argued that, as the strategic reserve for the Royal Navy in peacetime, the Royal Marines had two main functions: 1) keeping alive the Commando technique, while providing a trained nucleus for wartime expansion; and 2) providing highly mobile and lightly equipped troops for Imperial policing duties. In war, the Royal Marines were to conduct *all forms of raiding*, perform special tasks in large-scale combined (amphibious) operations, seize ports, and operate as regular infantry if necessary.³⁶⁸ In actual fact, it is doubtful whether any of the Commandos could have functioned in the amphibious raiding role. Ever since their re-deployment from Hong Kong in 1947, none of them had received any amphibious training. This was magnified by the fact that the three Commandos that made up the Commando Brigade were deployed in three separate locations at the end of 1948: HQ was in Malta with 45 Commando; 40 Commando was in Cyprus; and 42 Commando was in Egypt. Although it was maintained that the 'brigade could take its part in this [raiding] role provided that the necessary landing craft were made available and there was

³⁶⁶ COHQ ltr to CGRM, 6.12.48 (DEFE 2/2089, Docket No. CO(O) 27/47, Folio 38; NA); __, 'Minutes of the Second Meeting of the Inter-Service Raiding Committee...5th January 1949', 17.1.49 (DEFE 2/2090, Docket No. CO(O) 27/49, Folio 9; NA).

³⁶⁷ COS (49) 119, 5.4.49 (DEFE 2/2090, Docket No. CO(O) 27/49, folio 22; NA).

³⁶⁸ COS (48) 203, 11.12.48 (DEFE 5/9; NA).

sufficient time for rehearsals', it was also noted that '[s]upporting arms and services would also be required'.³⁶⁹

By the time the 'Seaborne Raiding' paper was finally considered by the COS in April, the overall military manpower shortage was so 'acute' that 'it would not be possible...to find the personnel required even for a small nucleus' of the SRU. As such, the Committee, in considering the general requirement for raiding operations, decided to ask the Joint Planning Staff to 'determine the extent and nature of this requirement on a world wide basis', specifically what 'would be needed in peacetime to meet this raiding commitment and the priority which should be accorded to the preparations'.³⁷⁰

The vast scale of this undertaking ensured that it was not until January of 1950 that the JPS had produced a 'final' draft report, including a revised directive for the COCOS, that was submissible to the COS Committee.³⁷¹ Whilst generally broadening COCOS' directive, and therefore COHQ's responsibilities with regard to raiding, the report also took into account a number of recommendations from the War Office. Although these revisions were incorporated into another 'final' report quickly enough to be approved by the Chiefs of Staff and the Minister of Defence by February,³⁷² another revised Directive to COCOS, not approved by the COS until April, forced yet another draft revision.³⁷³ The revised 'Raiding Operations' report was finally considered by the COS on 19 June 1950 and approved, although not without resolving the dilemma of having the Royal Marine Commando Brigade earmarked for land operations in case of a new war while also allocated to perform amphibious raiding in the Mediterranean should war break out.³⁷⁴

³⁶⁹ DCO(T) ltr to COCOS, 24.1.49 (DEFE 2/1572, Docket No. CO 646/49, folio 1; NA).

³⁷⁰ ___, 'Extract of the Minutes of 53rd Mtg of the COS(49), dated 8.4.49', n.d. (DEFE 2/1572, Docket No. CO 646/49, folio 24; NA).

³⁷¹ JP (49) 158 Final, 4.1.50 (DEFE 2/1442, Docket No. CO(O) 7/50(A), folio 1; NA).

³⁷² COS (50) 39, 1.2.50 (DEFE 5/19; NA).

³⁷³ ___, 'Extract of the Minutes of the 57th Mtg of the COS Ctee, dated 5 April 1950', n.d. (DEFE 2/1442, Docket No. CO(O) 7/50(A), folio 17; NA).

³⁷⁴ ___, 'Extract from COS (50) 92nd Mtg dated 19 June 1950', n.d. (DEFE 2/2091, Docket No. CO(O) 27/50, Folio 26; NA).

The report's analysis, which was on a 'world-wide basis', summarised the strategic situation 'in the short term' (*i.e.*, first few months) of a future war against the Russians as basically having lost all most, if not all of continental Europe, including Scandinavia, Sicily, Sardinia, Crete and Cyprus, but excluding the Spanish-Portuguese peninsula. In addition, most of the Middle East would have been lost, including 'Turkey, northern Syria, Iraq and Persia, and...even...as far as Israel'. As a result, 'any unorthodox warfare, such as raiding operations, which will tend to dissipate their forces in wasteful defensive tasks should be exploited from the outbreak of war'.³⁷⁵

The conclusions reached were essentially evolutionary as they represented the culmination of development that had begun in 1947 when raiding was first deemed as a probable requirement. From an organisational standpoint, it was recommended that COCOS remain generally responsible, in peacetime, for 'Raids by Sea' and all 'Raids' involving a withdrawal by sea, with the War Office gaining primary responsibility for 'Raids by Land' and 'Raids by Air' (in conjunction with the Air Ministry). In addition, the Inter-Service Committee on Raiding Operations, with COCOS still as Chairman, should continue to ensure co-operation among the three Services, co-ordinate staff requirements and maintain liaison with other authorities.³⁷⁶

From an operational perspective, the report recommended that various types of units be maintained at operational readiness in peacetime. Aside from Royal Engineer (RE) and Special Air Service (SAS) units, these also included the Royal Marine Commando Brigade (*i.e.*, three Commandos) in the Middle East; '[c]ertain men trained in the Small Raids Wing of the Amphibious School [RM] in the United Kingdom'; and the maintenance of required landing craft and ships in reserve, which also would have required Royal Marines. Upon mobilisation, in addition to one regiment of SAS, two additional Commando Brigades were also required, one at D + 3 months and another at D + 6 months in the UK 'for use in Western Europe'.³⁷⁷ In sum,

³⁷⁵ COS (50) 222, 29.6.50 (DEFE 2/2091, Docket No. CO(O) 27/50, Folio 32; NA). This actually contains JP (50) 50 (Final), 14.6.50 (DEFE 2/2091, Docket No. CO(O) 27/50, Folio 22; NA), 1-2.

³⁷⁶ COS (50) 222, 2-4.

³⁷⁷ COS (50) 222, 5.

whilst COCOS continued to maintain responsibility for co-ordinating all studies of—and preparations for—raiding on a joint basis, the Royal Marine Commandos had gained centre stage with regard to executing raids from the sea.

Doctrine and the *Manual of Combined Operations*, 1950

Raiding Doctrine

As the conceptualisation and practice of raiding—including small scale raids by ‘parties’—emerged to balance the pre-eminence of large-scale operations, the parallel development of raiding doctrine proceeded apace, if a bit delayed. By January of 1949, work on one of the aforementioned COHB ‘Series’, No. 10, which was to consist of four volumes, had already begun, although there seemed to be some confusion as to which volumes COHQ and the Royal Marines were responsible, thus resulting in only sporadic progress at first.³⁷⁸ Another complication was that the ‘world-wide’ analysis for raiding requirements was not officially approved until 1950, as detailed above. Once that happened, COCOS requested that the Royal Marines be responsible for the preparation of a new COHB to be titled *The Organisation, Training and Employment of Commandos*. This was to supersede a number of Second World War-era (COPs), namely No. 24 (*Cliff Assaults*, 1945), No. 26 (*Commandos in the Field*, 1945), and No. 27 (*Hardening of Commando Troops for War*).³⁷⁹ This task was quickly accepted³⁸⁰ and the new Handbook, now labelled Amphibious Warfare Handbook (AWHB) No. 10a, was published in 1951.³⁸¹ A complementary Handbook, No. 10b, *Amphibious Raids*, was produced that same year although it was most likely written by COHQ.³⁸²

³⁷⁸ DCO(P) memo to Distr., 17.1.49; GSO11(Pol) memo to Distr., 14.4.49; DCO(I) memo to Distr., 26.7.49 (DEFE 2/1572, Docket No. CO 580-49, Folios 1, 5, 7; NA).

³⁷⁹ COCOS ltr to CGRM, 28.2.50 (DEFE 2/1537, Docket CO 477/50, Folio 29; NA).

³⁸⁰ CGRM, ltr to COCOS, 15.3.50 (DEFE 2/1537, Docket CO 477/50, Folio 36; NA); DCO(P) ltr to Distr., 21.4.50 (DEFE 2/1573, Docket No. CO 580/50, Folio 1; NA).

³⁸¹ AWHQ (CAW & Cmdt-Gen, RM), AWHB No. 10a, *The Organisation, Employment and Training of Commandos*, 1951 (DEFE 2/1770; NA).

³⁸² AWHQ (CAW), AWHB No. 10b, *Amphibious Raids*, 1951 (DEFE 2/1771; NA).

The Manual of Combined Operations, 1950

Overshadowing the publication of Handbooks 10a and 10b, however, was the release of the capstone *Manual of Combined Operations* in March, 1950.³⁸³ As mentioned, this volume had been a work long in progress, considering that a revised draft of the 1938 edition had been produced by the end of the war, albeit with ‘a considerable amount of revision and re-writing...necessary’. It was not until mid-1948 that work on the *Manual* had restarted.³⁸⁴ A first draft of the *Manual* was finally circulated in March of 1949 and a second one followed the next month.³⁸⁵ At the same time, a number of unresolved points were brought up by a source within COHQ that needed to be addressed to complete the *Manual*, which mostly revolved around terminology. Aside from rather simple changes such as ‘exploitation’ instead of ‘follow-up stage’, which was more in compliance with American terminology, the School of Combined Operations (SCO) had recommended the substitution of ‘amphibious operations’ for ‘combined operations’, apparently again in a move towards more compliance with the US.³⁸⁶ The latter issue was addressed at an Executive meeting on 5 May with the COHQ ultimately deciding not to change British terminology, mainly because it was thought that the American term ‘amphibious’ represented a much narrower definition than ‘combined operation’.³⁸⁷ As a matter of fact, a very similar viewpoint had been taken by the US Army toward the US Naval Service’s narrow conception of ‘amphibious operations’ as compared to their broader encompassment of so-called ‘joint amphibious operations’.

Having gathered general agreement amongst the Service Ministries, a final draft was made ready for final COS approval by September 1949, although it was not officially

³⁸³ DCO(P) ltr to Distr., 21.4.50, 3.

³⁸⁴ DCO(P) ltr to Distr., 23.6.48 (DEFE 2/1671, Folio 1; NA).

³⁸⁵ ___, ‘Minutes of the Meeting...2nd March, 1949...’, n.d. (DEFE 2/1537, Docket CO 477/50, Folio 2; NA); and DCO(P) ltr to Executive, 8.4.49 (DEFE 2/1672, Folio 4; NA).

³⁸⁶ DCO(P) ltr to Executive, 3-4.

³⁸⁷ ___, ‘Minutes of the 10th Mtg of the Executive...5th May, 1949’, n.d. (DEFE 2/1610, Docket No. CO 768/1/49, folio 10; NA), 2-3; and ___, ‘Extract of the Minutes of the 10th Meeting of the Executive...5th May 1949’, n.d. (DEFE 2/1672, Folio 7; NA), 2.

promulgated until March 1950.³⁸⁸ As with similar manuals produced during the inter-war years, this one also emphasised the joint nature of its focus by stating that it was ‘intended as an introduction and guide to the basic principles of *all types of Combined Operations* for commanders, staff and other officers of the Navy, Army and RAF’.³⁸⁹ Its definition also did not differ appreciably from those offered in past doctrine, including the COPs.

A Combined Operation is defined as one involving the integration of sea and land forces with associated air support; and also of sea, land and air forces when an airborne assault is an integral part of such an operation. The type of Combined Operation depends on the aim to be attained, the resources available and the local conditions, but the operation is, in itself, only the means to an end.³⁹⁰

Two characteristics were notable for their variance with US naval doctrine. The first concerned the fundamentally inter-service (or joint) nature of a ‘combined operation’, which was unlike the essentially single service nature of the US Naval Service’s ‘amphibious operation’. The second concerned the emphasis that the whole enterprise was just a ‘means to an end’, whereas the emphasis on the ‘amphibious operation’ was that it was a separate and distinct *naval* operation.

Along these lines, the *Manual* was careful to point out the various differences with American doctrine. Whilst it asserted that British and American doctrine did ‘not differ in any important principle’, a number of underlying differences were revealed including that American doctrine had been derived specifically from ‘the Pacific “island war”, where special problems were successfully met and solved by the development of special methods’. On the other hand, the British ‘operational procedure and doctrine were developed primarily to meet European and Mediterranean conditions, and perhaps have a bias in that direction’. Although this may have resulted in a ‘divergence on points of detail and tactical procedure’ the *Manual* still maintained that the perception that the British and the Americans had their own ‘technique’ was merely a ‘false impression’.³⁹¹ This claim notwithstanding, the *Manual* was careful to re-emphasise that, when solutions to difficult situations were required, it was ‘important to remember that most of

³⁸⁸ DCO(P) ltr to Distr., 6.9.49 (DEFE 2/1672, Folio 16; NA). See also DCO(P) ltr to Distr., 21.4.50 (DEFE 2/1573, Docket No. CO 580/50, 3.

³⁸⁹ COHQ (COCOS), C. B. 3181, *The Manual of Combined Operations, 1950*, [3].50 (ADM 239/233; NA), 1. Emphasis added.

³⁹⁰ C. B. 3181, 2.

³⁹¹ C. B. 3181, 4.

the problems which seriously affect Combined Operations will be common to all operations of war in the future, and it will therefore be a matter of adapting a common solution to the special needs of a Combined Operation, than attempting to find a “specialist” solution for this kind of enterprise’.³⁹²

The Manual then proceeded to assess the current status of the relationship between ‘airborne’ and ‘seaborne’ operations as they had been so closely associated with the large-scale, ‘invasion’- (or *expeditionary*-) type operations conducted during the Second World War in the ETO.

It is to be expected that airborne operations will continue to take an increasingly important share in the attainment of the aim of a Combined Operation, which is usually the establishment of our forces on a hostile shore. The complete replacement of seaborne by airborne expeditions is not, however, yet within sight, and this manual is concerned mainly with the seaborne method. The airborne operation is therefore treated as a subsidiary to the seaborne assault, but the fact should not be lost sight of that on occasion in the future these roles may be reversed.³⁹³

Although the Manual simply references ‘Land/Air Warfare Pamphlet No. 4 “Airborne and Airtransported Operations”’ for further information, the above quote is important because it foreshadows the continued use of airborne operations in conjunction with seaborne ones, not only in actual operations like Operation MUSKETEER in 1956 and Operation VANTAGE in 1961, but also in theory as illustrated by the eventual adoption of the ‘seaborne/airborne/land operations’ concept in the early 1960s.

Two basic types of operation were then outlined and described: a ‘large scale assault’ and a ‘small scale assault’. The descriptions provided for each were very similar to those developed over the past years. The former ‘might form the prelude to the final offensive stage in a long war. The strategic aim would therefore be to capture an advanced base from which to mount important operations by naval and air forces, or to establish land and air forces on a main land-mass held by the enemy, in order to engage him in decisive battle’. The latter was simply on a ‘limited aim and scale...in the early stages of war, or during any strategic/defensive period’.

³⁹² C. B. 3181, 2.

³⁹³ C. B. 3181, 3.

Included as possibilities were the ‘seizure of small strategic objectives’ and ‘raids’ (as well as ‘estuary or river warfare’), although care was taken to point out that these endeavours ‘can be successful only against relatively light opposition’. One final ‘corollary of such limited operations may be the opposed re-embarkation’, otherwise known as an amphibious ‘withdrawal’.³⁹⁴

Although chapters on ‘Raids’ and ‘Estuary and River Warfare’ were included in the *Manual*, there was nothing groundbreaking about this publication, undoubtedly because of the limiting caveats introduced at the start. From an evolutionary point of view, indeed, the 1950 *Manual* resembled USF 6, which was also a general compilation of lessons learned from World War II. This situation was not wholly lost on the COHQ leadership who, in summarising the progress made since the end of the war, outlined the future direction and emphasis of British amphibious/expeditionary warfare development that would eventually dominate the next decade although would not be fully realised until the 1960s.

The doctrine of Combined Operations as taught up to now has been based on the lessons of the 1939-45 war and has envisaged a landing in the face of well organised enemy defences. It is intended to maintain and develop this technique, but since present policy visualises and stresses the small scale operation against limited opposition in the early stages of the next war, study is now being principally directed to the best use of our existing resources in this type of operation. During the course of the next few months it is hoped to produce a provisional doctrine specially applicable to the small scale assault versus light opposition, employing very limited numbers and quantities of specialised vessels or equipment and taking account of the present lack of headquarters ships (LSH), rocket support vessels, and amphibians. This study will also include the employment of the small Beach Group designed to land a Brigade Group and handle up to 600 tons a day by the most economical means.³⁹⁵

CONCLUSION

The above quote quite literally confirmed that the course of British amphibious/expeditionary development in the immediate post-World War II years was based on the Services’ *expeditionary* experiences in the ETO between 1943 and 1945. This was especially reflected at the organizational/institutional level of analysis through the retention of the jointly-staffed but independent COHQ establishment. It was also evident at the tactical/operational level,

³⁹⁴ C. B. 3181, 7.

³⁹⁵ DCO(P) ltr to Distr., 20.6.50, (DEFE 2/1514, Docket No. CO 580B/50, folio 3; NA), 1.

not only with respect to the promulgation of joint doctrine but also with regard to the Chief of Combined Operations' directives, which encompassed *all* types of 'combined operations'. Whilst this contrasted with the US Naval Service's consolidation of its Second World War *amphibious* experience—at the same two levels of analysis—it is worth noting a similarity that would continue to evolve in the 1950s. This was between the course of overall British development on the one hand and that of the US Army on the other, with the latter having also drawn on its extensive *expeditionary* World War II experience, not only in Europe but also in the Southwest Pacific.

PART TWO: 1950-1957

AMERICAN AND BRITISH DEBATE...AND BRITISH COMPROMISE?

The trend of inter-national consolidation between 1945 and 1950 did not continue with the same deliberateness during the 1950 to 1957 timeframe, which seemed to indicate that a slight convergence of developmental courses had occurred. This resulted from the deepening and widening of the internal debates that had surfaced within each country in the late 1940s, particularly in the United States.

In the US, the Department of the Navy (*i.e.*, US Navy and Marine Corps) forged ahead with its innovative ‘future concept of amphibious operations’, which expanded on the groundbreaking concept introduced in the late 1940s, mostly through further conceptualisation and testing. At the same time, the initial debate between the Naval Service and the Army expanded to include the nascent Air Force. As a result, disagreements amongst the services threatened to become permanently entrenched, as specifically demonstrated by a failed attempt to formulate joint amphibious warfare doctrine between 1951 and 1955. During this process, the services outlined a set of ‘divergent views’ on amphibious operations which, in turn, appeared to revolve around the dichotomy between so-called ‘amphibious operations’ and ‘joint amphibious operations’. The former reflected the Naval Service’s *amphibious* wartime experience of seizing island bases while the latter reflected the other two services’ *expeditionary* experience of invading continental land masses which, again, more closely resembled overall British experience with ‘combined operations’. Finally, the Army and the Air Force each continued to develop its own *expeditionary* capabilities. Whilst this was most conspicuously demonstrated by the promulgation of single service amphibious operations doctrines, it also included a notable amount of (joint) exercising, as well as the procurement of certain amphibious equipment, particularly by the Army.

In the United Kingdom, the Amphibious Warfare Headquarters (AWHQ—formerly COHQ) establishment proceeded to address the broad scope of responsibilities for ‘combined

operations' that it had been assigned after the war. These ultimately ranged from 'raiding', which continued to be pursued on a joint basis but with the Royal Marine Commandos acting in the lead functional role, to 'beach organisation'-type ventures that included 'maintenance', 'withdrawal' and 're-supply' operations, to joint amphibious/airborne assaults against limited opposition, as was effected against Port Said during the Suez Crisis of 1956. However, as a result of an ongoing 'defence review' process that took into account the shifting geo-strategic situation as well as continually limited defence expenditures, the AWHQ establishment experienced a partial consolidation as well as a significant institutional downsizing.

At the same time, the RM Commandos moved into a central role with regard to amphibious warfare practice, essentially as seaborne light infantry. Although the Commandos were successfully employed in this role during the joint seaborne/airborne attack on Suez in 1956, much of the early and mid-1950s was spent conducting various 'cold war' tasks. As such, any sense of acquiring *exclusive* responsibility over amphibious development as a whole was conspicuously undercut by the continued existence of AWHQ itself and the fact that this joint entity continued to retain primacy over the formulation of overall (joint) amphibious policy, concepts and doctrine. Furthermore, existing differences between the Commandos and their apparent counterparts in America, the US Marine Corps' Fleet Marine Force (FMF) units— notwithstanding the huge disparities in overall numbers—tended to undermine direct comparisons as true 'standing' (*i.e.*, permanently organised and afloat) *amphibious* forces, which the latter effectively were.

CHAPTER THREE: THE UNITED STATES, 1950-1957

OVERVIEW

As during the first few years immediately following World War II, amphibious/expeditionary developments in the US between 1950 and 1957 have generally been depicted as being predominated by *naval* developments, meaning those achieved by the US Navy and Marine Corps. The focus of this history revolves around the successful development and testing of the so-called ‘future concept of amphibious operations’, which centred on the employment of troop transport helicopters from specialised amphibious shipping to conduct amphibious assaults in both atomic and non-atomic conditions. However, and as discussed in Chapter 1, some very recent scholarship focusing on US Army amphibious operations during the Korean War has emerged to provide an initial balance to this prevailing naval interpretation.³⁹⁶

Building on these two strands of research, amongst others, this chapter aims to develop further a comprehensive account of American amphibious/expeditionary warfare development as a whole, whilst also offering new observations on certain issues that remain open to further interpretation, not only from a national perspective, but also ultimately from an international one. For example, although the ‘future concept’ was clearly important insofar as it expanded on the original groundbreaking theory promulgated in the late 1940s, the practical requirements involved in fully implementing this concept were, in fact, quite limiting. As a result, this effectively precluded the concept itself from being as fully realised as generally perceived.³⁹⁷ This was because only the *assault* elements of a Marine Division (which itself had to be considerably lightened to become fully air-transportable) could be transported ashore by the helicopters that existed at the time. Heavier elements such as tanks, artillery, and engineering equipment, which were essential in any seriously opposed amphibious assault, therefore had to be landed using conventional waterborne means. As the doctrinal publication that announced this

³⁹⁶ See Chapter 1, 62-72; and discussion of Boose’s work in Introduction, 21.

³⁹⁷ It can be noted here that the concept, as outlined in the 1950s, still has effectively not yet been realized—even today—in that an ‘all helicopter assault’ concept has not been successfully implemented.

new concept at the end of 1955 itself admitted, the ‘surface assault across the beach by conventional means...constitut[es] the main effort’.³⁹⁸ On the one hand, this undermined the original idea, which was to minimise the effects of atomic bombs being employed defensively against a concentrated amphibious assault; on the other hand, it did not help distinguish the developments of the Naval Service from the Army which, as discussed previously, had openly challenged the apparent exclusivity of naval responsibility for amphibious warfare.

Second, just as it had been for the inter-war years (until successfully corrected), the contributions of the other services to amphibious/expeditionary development during this timeframe has tended to be downplayed, if not marginalised, in the secondary literature. This remained the case for US Army contributions until very recently when, as previously discussed, a major gap was filled that, whilst focusing heavily on Korean War Army amphibious operations, included some valuable details on related Army developments up through the Vietnam conflict and even afterwards.³⁹⁹ Not only did this work help introduce the parameters of the emerging joint (national) debate that was becoming entrenched amongst the US armed services by the mid-1950s, but it also continued to outline the US Army’s specific conceptualisation of so-called ‘joint amphibious operations’, which evolved into the 1960s. Many of these latter traits, in turn, appeared to resemble the overall British approach toward traditional ‘combined operations’, a concept that was also at the root of a continuing divergent debate in the UK.

STRATEGIC ASPECTS

The geo-strategic situation that evolved between 1950 and 1957 was one in which the Cold War—between the maritime alliance led by the United States, now formally under the rubric of the North Atlantic Treaty Organisation (NATO), and the continental bloc of the ‘satellite’ states led by the Soviet Union (eventually under the rubric of the so-called ‘Warsaw Pact’)—became entrenched on a truly global scale. It was during this period that the underlying

³⁹⁸ HQ, USMC, LFB Number 17, *Concept of Future Amphibious Operations*, 12/13/55 (HAF 453, Box 21A, Archives Branch, USMC Research Center, Quantico, VA), 3-4.

³⁹⁹ See Boose, 327-349.

policy of ‘containment’, which had been introduced in the late 1940s, effectively became not only ‘militarised’ but also ‘nuclearised’.⁴⁰⁰

Defence Policy

Largely as a result of the invasion of South Korea by communist North Korea on 25 June 1950, US President Harry S. Truman formally approved one of the most seminal documents of the Cold War, known colloquially as ‘NSC 68’, on 30 September.⁴⁰¹ Originally submitted in mid-April,⁴⁰² ‘United States Objectives and Programs for National Security’ effectively ‘laid out the rationale for US strategy during much of the cold war’.⁴⁰³

Concluding that the ‘fundamental design’ of the Soviet leadership was world domination, NSC 68 also stated that ‘Soviet efforts [were] now directed toward the domination of the Eurasian land mass’.⁴⁰⁴ From a purely military point of view, this ultimate objective seemed increasingly plausible considering the USSR’s overwhelming superiority in conventional forces facing the European continent, which had been repeatedly assessed.⁴⁰⁵ NSC 68 estimated that an attack launched against NATO would most likely overrun all of ‘Western Europe, with the possible exception of the Iberian and Scandinavian Peninsulas;...drive toward the oil-bearing areas of the Near and Middle East; and...consolidate Communist gains in the Far East’. From an amphibious/expeditionary warfare point of view, due to the ability of the Soviets to employ atomic weapons, it also seemed possible for them ‘to prevent any allied “Normandy” type invasion operations intended to force a reentry into the continent of Europe’. Indeed, it was estimated that the USSR had 10-20 atomic bombs in mid-1950 and would have 200 by mid-1954.⁴⁰⁶

⁴⁰⁰ See, for example, Gaddis, *Strategies*, Chapters 4-6.

⁴⁰¹ NSC 68/2, 9/30/50, in *FRUS*, 1950, Vol. I, *National Security Policy*, 400.

⁴⁰² See NSC 68, 4/14/50, in *FRUS*, 1950, Vol. I, 234-292. The actual date of the report is 4/7/50.

⁴⁰³ May, Ernest R., (ed.), *American Cold War Strategy: Interpreting NSC 68* (Boston, MA/New York, NY: Bedford Books of St. Martin’s Press, 1993), vii.

⁴⁰⁴ May, 26-27.

⁴⁰⁵ See Ross, 138, 147. See also NSC 100, 1/11/51; and NSC 114/1, 8/8/51, in *FRUS*, 1951, Vol. I, *National Security Policy*, 7-18, 127-157.

⁴⁰⁶ May, 38-39. See also Rosenberg, David A., ‘The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960’, *IS*, 7:4 (Spring 1983), 3-71.

As a result of this negative assessment, NSC 68 declared that ‘the long-range allied military objective in Western Europe must envisage an increased military strength in that area sufficient possibly to deter the Soviet Union from a major war or, in any event, to delay materially the overrunning of Western Europe and, if feasible, to hold a bridgehead on the continent against Soviet Union offensives’.⁴⁰⁷ From a strategic perspective, this primarily aimed to contain the Soviet Union through strengthening and creating alliances along the periphery of Soviet and communist control. In Europe, NATO was strengthened, first by the activation of a central, US-led military command in Belgium on 1 April 1951 and then by the admission of three states that directly bordered the Soviet sphere of influence: Greece and Turkey in 1952; and West Germany in 1955. (The latter’s accession, in turn, prompted the establishment of the ‘Warsaw Pact’ in May of 1955.) In the Pacific, subsequent to the signing of the Sino-Soviet pact in February of 1950, a number of collective security pacts were made by the United States, which aimed to encircle the Eurasian continent geographically. These included the following: the bi-lateral ‘Philippine Treaty’ (August 1951); the ‘ANZUS (Australia-New Zealand-United States) Treaty’ (September 1951); the bi-lateral ‘Japanese Treaty’ (September 1951); the bi-lateral ‘Republic of Korea (South Korea) Treaty’ (October 1953); the ‘Southeast Asia Treaty’ (September 1954); and the bi-lateral ‘Republic of China (Taiwan) Treaty’ (December 1954).⁴⁰⁸

Strategic War Plans

As a result of the signing of the North Atlantic Treaty in 1949, American war planners generally adopted a collective security foundation to plan for potential global conflicts in the 1950-1957 timeframe. Although short-, medium- and long-term plans increasingly sought to establish a firm line of defence on the European continent while remaining on the strategic defensive in the Far East, almost all of them contained scenarios in which amphibious landings operations of both the ‘seizure’ and ‘invasion’ type were expected. As in the late 1940s, the former were needed to capture air and naval bases on the periphery of the Eurasian continent

⁴⁰⁷ May (ed.), *American*, 39.

⁴⁰⁸ ___, ‘Western Security System’, *MR*, 34:2 (5/54), 62; ___, ‘Southeast Asia Treaty Nations’, *MR*, 34:9 (12/54), 69; and ‘Figure 1’ in ___, ‘Readiness for the Little War’, *MR*, 37:1 (4/57), 15.

from which atomic air strikes and invasions could be mounted, whilst the latter were necessary to execute large-scale land campaigns to liberate occupied territories and ultimately defeat (if not also occupy) the Soviet Union itself.

The first 'emergency war plan' that reflected this nascent defence alignment was code-named OFFTACKLE.⁴⁰⁹ It provided an analysis of the first two years of a war beginning in 1949 and was designed for a situation that was very similar to 1940 in which the European continent as well as much of the Middle East and Far East would be occupied by the USSR within three months. The Western allies would immediately retaliate, however, by launching an atomic counter-attack by air whilst also securing lines of communication in the Atlantic and Mediterranean, which involved occupying or seizing a number of advanced air and naval bases, including possibly 'Sicily, Southern Italy or Sardinia, and/or Corsica' during a massive manpower mobilisation. Soviet-occupied territories would then face a two-pronged 'reinvansion' from North Africa and the British Isles similar to endeavours mounted in World War II. Despite being deemed militarily 'infeasible' in certain respects, OFFTACKLE was still approved by the JCS in December 1949, again in January 1950, and 'retained as the basic emergency war plan until mid-1951'.⁴¹⁰

Prior to OFFTACKLE even being detailed, the first long-range war plan was already being outlined. This plan, code-named DROPSHOT, assumed a dramatic increase in defence spending, which was deemed necessary to counter the Soviet's overwhelming conventional strength.⁴¹¹ The plan's 'overall strategic concept' essentially involved 'conducting a strategic offensive in Western Eurasia and a strategic defensive in the Far East'. From an amphibious/expeditionary warfare perspective, implementing this strategy would require two successive phases, the first of which involved securing and controlling 'essential strategic areas' and 'bases'. This, in turn, called for 'seizure'-type amphibious operations to accomplish, almost

⁴⁰⁹ Palmer, *Origins*, 63.

⁴¹⁰ Ross, 111-118.

⁴¹¹ See Brown, Anthony C., (ed.), *DROPSHOT: The United States Plan for War with the Soviet Union in 1957* (New York, NY: The Dial Press/James Wade, 1978). See also Ross, 119-132.

all of which mirrored the amphibious landings that were dominated by the Naval Service in the Central Pacific during World War II.⁴¹²

The other area of DROPSHOT's strategic concept concerned the 'launch [of] coordinated offensive operations of all arms against the USSR' which, whilst dominated by 'invasion'-type enterprises, would also involve 'seizures' in certain circumstances. Similar to the events that occurred in the Second World War, DROPSHOT presented three general offensive options that involved one or more of the following options: 'amphibious and airborne landings on the German North Sea coast'; 'amphibious and airborne landings in the Athens-Piraeus area'; the 'possible seizure of Aegean islands'; 'amphibious and airborne assaults...in the Salonika...and...the Alexandroupolis area[s]'; the seizure of the 'Turkish straits...by ground attacks...in conjunction with amphibious and airborne landings'; and finally, major 'amphibious and airborne landings...against the northwestern Black Sea coast'.⁴¹³ Although both the 'seizure' and 'invasion' types of endeavour were described here, the more notable in this case were the latter as they resembled the 'joint amphibious operations' (or *expeditionary* operations) that had been conducted by the Americans and the British in the ETO during World War II.

As evidenced above, and by subsequent 'intermediate-range' war plans (for war beginning in 1954) such as Plan REAPER,⁴¹⁴ both amphibious 'seizures' and expeditionary 'invasions' were to play a vital role in any future war to retake Western Europe from the Red Army. As such, both the Naval Service, which had employed mostly 'seizure'-type operations during World War II in the Central Pacific, and the Army (as well as the Air Force), which had employed 'invasion'-type operations in the ETO, had legitimate arguments as to why their approaches, concepts and practices were required. Whilst the legitimacy of the former's approach was suspect from the latter's point of view as it was too narrowly focused on so-called 'amphibious operations', the legitimacy of the latter's conceptualisation of what were referred to as 'joint amphibious operations' was initially based on technical (but significant) legal positions.

⁴¹² Brown, *DROPSHOT*, 38, 156, 230.

⁴¹³ Brown, *DROPSHOT*, 273-281.

⁴¹⁴ Ross, 142-145.

ORGANISATIONAL/INSTITUTIONAL ASPECTS

As discussed in Chapter 1, the immediate post-war period was marked at the organisational level by a complete re-organisation of the American defence establishment. Whilst creating a centralised Department of Defense (DOD) with three Military Departments under a civilian Secretary of Defense (SecDef), it still allowed the Department of the Navy (DN) to consolidate its apparent primacy in amphibious warfare development. However, this trend did not continue between 1950 and 1957. Instead, although the Marine Corps—which continued to find it necessary to protect its continuing efficacy, if not existence, as a naval fighting force—managed to secure a few small but significant legislative and regulatory advances, this period was still characterised by an overriding effort toward further centralisation from the highest levels.

Public Law 412 (June, 1952)

The newly-renamed Department of Defense was less than one year old when the Korean War diverted much of its attention and energies from re-organization to waging another (albeit limited) war. Still, a number of new laws and regulations were adopted between 1950 and 1957 which, while minor relative to the National Security Act of 1947 and its 1949 amendments, still had a notable impact on inter-service relationships as well as on the services' respective functions and responsibilities, particularly with regard to the US Marine Corps.

The first of these was Public Law 416, of 28 June 1952, which directly affected the US Marine Corps. First, it mandated that the USMC—within the DN—‘shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein...’.⁴¹⁵ Although this legislation did not ensure that these divisions and/or air wings would be fully manned in times of peace, it did provide a permanent organisational foundation upon which the Corps' based its integrated ‘combined arms’ (air-ground) formations, a legal feature that was unique amongst all of the

⁴¹⁵ See ‘*The National Security Organization—1949-52*’, in Cole..., 114.

American armed forces.⁴¹⁶ These, in turn, were central to the development of the Marines' 'concept of future amphibious operations', as will be seen in more detail below.

The second part of the legislation gave the Commandant of the Marine Corps (CMC) more of a voice at the highest levels of defence organisation and planning by permitting him to attend meetings of the Joint Chiefs of Staff (JCS) when topics relevant to the USMC were on the agenda. On these occasions, the law stated that the CMC 'shall have co-equal status with the other members' of the Joint Chiefs of Staff.⁴¹⁷ This was important because particularly when the JCS were discussing war plans that included amphibious/expeditionary operations. Soon after enactment of the law, the CMC found himself participating 'in discussions concerning 17% of the items considered by the Joint Chiefs'.⁴¹⁸

Through this legislation, the Marine Corps had become permanently ensconced in the American defence establishment. In addition, while setting a peacetime manpower ceiling, it also established a permanent minimum force structure. Nothing similar occurred in the United Kingdom with regard to the Corps of Royal Marines, which simply remained a part of the Royal Navy. Instead, in the UK, whatever permanent organisational standing that existed with regard to amphibious warfare was accorded to the Combined Operations Headquarters (COHQ), which was soon to be renamed the Amphibious Warfare Headquarters (AWHQ).

Changes to Navy Organisation

Additional changes that boosted the standing of the Marine Corps were made within the organisational structure of the Department of the Navy. These largely occurred in mid-1953 and concerned the status of the CMC and the status of the Marine Corps as a fourth service. Before 30 June, the CMC had been depicted organisationally 'on a level with the technical bureaus of the Department of the Navy, and...in the same category as the bureau chiefs'. By 1 August, however, after changes to Navy Regulations, 'the Commandant [was] elevated from the bureau

⁴¹⁶ See Millett, *SEMPER FIDELIS*, xv.

⁴¹⁷ 'National Security Organization', in Cole..., 114.

⁴¹⁸ ___, 'Relationship of the Marine Corps with the Other Services', [1953/4] (RG 127: RRMOP&O, Box 28, File 15; NARA), 1.

chief level to a position comparable to the Chief of Naval Operations, being designated “Marine Corps Command Assistant”, which was similar to the CNO’s designation as “Navy Command Assistant”.⁴¹⁹ While the CMC and CNO now appeared to be on equal command footing, this was not quite the case when it came to command from a specific amphibious warfare perspective. This was due to the fact that FMF units were automatically under the operational command of the CNO while assigned to ‘The Operating Forces of the Navy’.⁴²⁰ Indeed, this permanent command arrangement was what gave the ‘amphibious operations’ conducted by the Navy and Marine Corps much more of a specifically *naval* character than a ‘joint amphibious operation’ conducted by Army and Navy—and possibly Air Force—forces.

Due to the confusion caused by some of these developments, certain aspects of Navy-Marine Corps relationships were in need of clarification. This was perhaps even a result of the language used by the Secretary of the Navy himself when announcing the aforementioned agreement.

The Marine Corps, while not a separate service in the sense of the Army, Navy and Air Force, is a unique service and forms an integral part of the Department of the Navy. Because of its specialized mission and objectives, it is distinct from a board, bureau or office of the Department, and yet is an inseparable part of a composite whole comprising the Naval Establishment.⁴²¹

Not helping the situation was the fact that the NSA of 1947 had specifically *not* recognised the Marine Corps ‘as a separate service’, which was reinforced by the exclusion of the Commandant from the JCS, at least until the 1952 law (P.L. 412) changed this arrangement partially.⁴²² Furthermore, language in the DOD Directive that had officially replaced the ‘Functions Paper’ continued to refer to the Army, Navy and Air Force as the ‘three major services’, which implied that the Marine Corps was only a ‘minor service’, if a service at all.⁴²³

From a developmental perspective, all of these latter factors served to undermine the legal and organisational changes that had taken place in 1952 and 1953 that were to be used by

⁴¹⁹ USMC, ‘Relationship’, 3, Charts 2 & 3. See also CMC, memo to All Commanding Officers, 9/21/53 (RG 127: RRMOP&O, Box 28, File 15, Tab 8; NARA), 1.

⁴²⁰ See Enclosures to CMC, memo to All Commanding Officers.

⁴²¹ SECNAV, Memorandum to CNO/CMC, 4/7/54 (RG 127: RRMOP&O, Box 28, File 3; NARA), 1.

⁴²² Keiser, *Unification*, 113.

⁴²³ See ‘DOD Directive No. 5100.1, 16 March 1954’ in Cole..., 293-306.

the Naval Service to dispel the longstanding (and ongoing) perception that the Marine Corps was not, in fact (and now legally), a fourth service. As will be seen in more detail below, this, in turn, retarded the Naval Service's efforts (particularly those of the Marine Corps) to argue that there were no significant organisational differences between so-called 'amphibious operations' and 'joint amphibious operations' (as there were actually two services already taking part in the latter, the Navy and the Marine Corps). The Army and the Air Force, however, not to mention others within the defence establishment, viewed the Navy and the Marine Corps as part of a singular Naval Service that therefore could only conduct (limited) 'amphibious operations' *per se*. To conduct large-scale amphibious/expeditionary warfare, 'joint amphibious operations' using the resources of all 'three major services' were still required. This appeared to be the case in Great Britain where the Royal Marines Commandos, because of their overall size and composition, had essentially been limited to performing amphibious raids and acting as a mobile Imperial police force, whilst AWHQ (formerly COHQ) remained responsible for developing all types of 'combined operations'.

TACTICAL/OPERATIONAL ASPECTS

By 1950 the Naval Service—led again by the Marine Corps—had established itself in a seemingly dominant—if not exclusive—position among the US armed forces with respect to the development of amphibious warfare concepts and doctrine as well as equipment. Although this situation was reinforced by the performance of the Naval Service in the Korean War, particularly with the amphibious assault at Inchon and subsequently with the Marine Corps' continuous development of its 'vertical envelopment' concept—which was central to its 'concept of future amphibious operations', the reality was quite different. Due to the new geo-strategic circumstances which focused on a future war against a continental (*i.e.*, Eurasian) enemy and organizational/institutional changes that were pressuring the defence establishment to become increasingly centralized and unified (*i.e.*, 'joint'), both the Army and the Air Force were able to challenge the apparent monopoly on amphibious warfare development held by the Naval Service.

This, coupled with the fact that the naval establishment's conceptualization of 'future amphibious operations' seemed to have outrun the technological capabilities of available equipment at the time (mainly with respect to helicopter lift), ultimately resulted in what appeared to be an impasse with regard to the development of amphibious warfare, particularly with regard to the larger-scale 'joint amphibious operations'. As will be seen in a later chapter, however, this situation did manage to set the stage for compromise between and among the services, which eventually resulted in the production of (joint) amphibious warfare doctrine in the 1960s.

The Korean War and 'Amphibious/Expeditionary Warfare'

The major offensive amphibious operations that were conducted during the Korean War—Pohang-Dong (July 1950), Inchon (September 1950), and Wonsan (October 1950)—have been thoroughly analysed.⁴²⁴ Several observations, particularly of the operation at Inchon, are significant because they provide evidence that parallel *but different* courses of amphibious warfare development were evolving in America between the naval establishment on the one hand and the Army (and Air Force) on the other.

The first concerns the impact of atomic weapons (or lack thereof) on amphibious warfare. Despite specific assertions to the contrary,⁴²⁵ the assault at Inchon did not specifically refute the predictions made by General Omar Bradley that large-scale (joint) amphibious operations were facing obsolescence against enemies armed with atomic weapons. As the North Koreans did not have any atomic weapons to employ, there was never any such threat to take into account in the first place. This effectively precluded Bradley's forecast from even being tested although one contemporary article published in July 1950, for example, concluded that the amphibious assaults at Normandy, Leyte, and Okinawa, would most likely have been devastated

⁴²⁴ See, for example, Boose, Chapters 3-7. See also Chisholm, Donald, 'Negotiated Joint Command Relationships – Korean War Amphibious Operations, 1950', *NWCR*, 53:2 (Spring 2000), 65-124.

⁴²⁵ See, for example, Isenberg, *Shield*, 157; Heinl, *Soldiers*, 530; Heinl, *Victory*, 3; Krulak, *First to Fight*, 71; Simmons, *Marines*, 180; Love, Volume Two, 335; and Alexander/Bartlett, 1.

had two atomic bombs—similar to those used against Japan—been employed in these scenarios.⁴²⁶

A second observation relates to the type (or conception) of amphibious landing that was actually employed at Inchon. According to the author of the official history of the naval war against Korea, ‘the story of [the] Inchon landing is the story of the Pacific War repeated. It used no new tactics, developed no new doctrine, [and] introduced no new weapons. Inchon added little to the US Marines’ art of amphibious assault. It did reaffirm the emphatic proof of the Pacific War—that a difficult beach could be seized’.⁴²⁷ However, from a broader, joint service and operational-level perspective, the attack at Inchon seemed more similar to certain World War II amphibious landings that had been conducted in the ETO (*e.g.*, Salerno and Anzio, both of which were on an immense peninsula) and, even more so, in the Southwest Pacific Area (SWPA) (*e.g.*, during the New Guinea campaign or in the Philippine archipelago). This was revealed in two main areas: first, in the operational conception of the enterprise; and second, in the operational command and organizational structure.

Concerning the operational concept of the Inchon attack, it was not a pure frontal assault against a highly-defended (but limited) objective such as an island or atoll. Instead, it was a ‘deep-envelopment’⁴²⁸ operation that—as part of a larger land campaign—was designed to create an ‘anvil’ of forces against which the ‘hammer’ of the attacking Eighth Army (after breaking out of the Pusan perimeter almost simultaneously) would crush the retreating North Korean forces.⁴²⁹ To use MacArthur’s own words, it was an ‘amphibious landing of a two division corps in [the] rear of enemy lines for [the] purpose of enveloping and destroying enemy forces in conjunction with [an] attack from [the] south by Eighth Army’.⁴³⁰ All of this indicated that the amphibious operation was an extension of the land campaign that was being conducted on the Korean peninsula, making it, in the words of a contemporary author, an ‘*envelopment by amphibious*

⁴²⁶ Allen, Chester F., (Lt-Col., USA), ‘Dispersed – Yet Organized’, *MR*, 30:4 (7/50), 24-30.

⁴²⁷ Cagle, Malcolm W., (Cmdr., USN), ‘Inchon – The Analysis of a Gamble’, *USNIP*, 80:1 (1/54), 51.

⁴²⁸ Baer, 324.

⁴²⁹ Heinl, *Soldiers*, 547; Simmons, *Marines*, 188.

⁴³⁰ Heinl, *Victory*, 24-44.

assault'.⁴³¹ Again, to paraphrase the National Security Act of 1947 and the 'Functions Paper', the Inchon endeavour was far less of a limited land operation essential to the prosecution of a naval campaign and much more of a naval operation essential to the prosecution of a land campaign.⁴³²

This perspective was further supported by a second revealing detail: the establishment of a higher echelon joint command structure, Joint Task Force 7 (JTF 7), which functioned before, during, and after, the *assault* phase of the (joint) amphibious operation. Whilst tactical command over the 1st Marine Division (MarDiv)—the assault division—had been transferred ashore on D+1 (16 September), essentially after the assault, operational command over the Landing Force (consisting of the 1st MarDiv and the 7th Infantry Division—ID) was not passed ashore until the 21st, after a phase of 'consolidation', which marked the end of the amphibious enterprise.⁴³³

In sum, whilst the assault at Inchon has been celebrated as an example of the Naval Service's prowess in conducting 'amphibious operations' that resembled the 'seizure'-type enterprises of the Central Pacific during World War II, a number of observations tend to undermine such a final conclusion. As argued above, this is mainly because the amphibious landing at Inchon more closely resembled the larger-scale, 'joint amphibious operations' (or 'invasions') that had been performed in the ETO—and particularly the SWPA—during the war.

The Naval Development of 'Amphibious Operations' (or *Amphibious Warfare*)

Amphibious warfare development by the Naval Service at the tactical/operational level was characterised by a number of parallel yet overlapping evolutions between 1950 and 1957. The first involved the ongoing refinement of doctrine, which resulted in the promulgation of a new or, at least, updated series of naval amphibious doctrine as well as an updated set of landing force publications. The second consisted of the development of the 'concept of future amphibious operations' which, while based on 'vertical envelopment' by helicopter, culminated

⁴³¹ Canzona, Nicholas A. 'Is Amphibious Warfare Dead?', *USNIP*, 81:9 (9/55), 991. Emphasis in original. See also Weigley, Russell F., *The American Way of War: A History of United States Military Strategy and Policy* (New York, NY: MacMillan, 1973), 386.

⁴³² Roe, Thomas G. Ernest H. Giusti and Benis M. Frank, 'A History of Marine Corps Roles and Missions: 1775-1962', *Marine Corps Historical Reference Series*, Number 30 (Washington, DC: HQ, USMC, 5/31/62), 19.

⁴³³ See, for example, Heinl, *Victory*, 128, 157, 189.

in the publication of LFB-17, *Concept of Future Amphibious Operations*, in December of 1955. This ‘future concepts’ document included the concurrent development and evaluation of new equipment such as transport helicopters and helicopter assault carrier ships as well as the reorganisation of the Fleet Marine Force into an essentially air-transportable assault force to help implement the new concept. Although these developments have generally been hailed as revolutionary, a number of points bear remembering with regard to the overall courses of amphibious/expeditionary warfare development in both America and the United Kingdom.

From a *national* perspective, for example, developments in doctrine did not help resolve, let alone dampen, the increasing debate(s) amongst the armed Services, as they evolved from ‘seizure’ versus ‘invasion’ to ‘amphibious operation’ versus ‘joint amphibious operation’. Second, despite the ‘future concept’, the amphibious attack was still ultimately dependent on conventional seaborne lift capabilities as capability limitations precluded heavier equipment from being transported by standard helicopters. This technological shortcoming was the source of a fundamental disagreement with the Army with regard to *amphibious* warfare versus *expeditionary* warfare concepts. Lastly, even though the US had far greater resources at her disposal, which allowed for a developmental advantage when it came to weapons procurement, particularly with regard to helicopters and amphibious shipping, this did not necessarily translate into any sort of advantage with regard to conceptual developments.

Navy (Amphibious) Doctrine Development

Despite the operational focus on the war in Korea, doctrinal development continued unabated during the conflict. In mid-1951, the US Navy began outlining the revision of the *USF* series of manuals after concluding that a new series of publications was required which, while ‘in consonance with Joint Action Armed Forces where applicable’, was to be split into ‘two broad divisions’—Naval Warfare Publications (NWP) and Fleet Training Publications (FTP)—in which the former was further separated into ‘four categories’. Amphibious warfare was included

under Category III ('Conduct of Naval Operations'), and the new keystone amphibious warfare manual was to be titled NWP 22, *Amphibious Operations*.⁴³⁴

First published in December of 1952,⁴³⁵ NWP 22 outlined a slightly broader range of amphibious warfare operations as compared to those offered in USF 6 in 1946. Two general 'types' of amphibious operations were described: 'one involving the landing of forces on a hostile shore and the other involving withdrawal of troops from land'.⁴³⁶ This latter concept logically seemed to reflect the evolution of 'general war' planning since 1946, which recognised the possibility of the evacuation of allied forces from continental Europe in case of an overwhelming Soviet invasion, although the only evidence of planning for these types of enterprises stemmed from the Korean War.⁴³⁷ By comparison, such enterprises made up a considerable part of the British conception of 'combined operations' thinking at the time. Although NWP 22 also specifically referenced 'joint amphibious operations', it did so only from a strict force structure perspective by simply recognising the difference between operations 'conducted by forces of the naval establishment alone' (referred to as 'seizures' in the past) and those 'conducted by such forces in combination with significant elements of the other armed services'.⁴³⁸

The manual listed the six phases of an amphibious operation: 'planning', 'embarkation', 'rehearsal', 'movement to the objective area', 'assault', and 'consolidation', with the last being defined as 'the period during which the beachhead, advanced base area, or area to be denied to the enemy is made secure, and any necessary tactical and logistical buildup is begun'.⁴³⁹ The 'termination' of an amphibious operation was also discussed, with notable emphasis being made

⁴³⁴ ___, 'Final Recommendations of the Conference on Revision of the USF Series of Publications, 4-8 June 1951', A2-A4; ___, 'Planned Tactical Doctrine Publications', 6/8/51 (P1946CF: Box 545; OAB, NHHC), 1. See also DN, NWP 0, *Presentation and Scope of the Naval Warfare Publications*, 4/52, VII, Section II; and OCNO, NWP 0, *Guide and Master Index to the NWP's, 1954* (P1946CF: NWPPS, Box 415; OAB, NHHC).

⁴³⁵ See CMC ltr to CNO, 7/30/52 (RG 127: RRDAWD, Box 1(3); NARA), 1-2.

⁴³⁶ DON, NWP 22, *Amphibious Operations*, 12/52 (P1946CF: NWPPS, Box 415; OAB, NHHC), 1-4.

⁴³⁷ See Boose, 232-244, 251-256.

⁴³⁸ DON, NWP 22, 1-4.

⁴³⁹ DON, NWP 22, 1-4-1-8.

on this occurring quickly, which seemed to reflect concern for the vulnerability of amphibious shipping that had characterized the island seizures of World War II.⁴⁴⁰

Termination of an amphibious operation is effected when the final objective of the amphibious task force has been captured and the beachhead area, advanced base area, or area to be denied to the enemy has been made secure. *Operations subsequent to the consolidation phase are not considered part of the amphibious operation, though they may require the use of amphibious equipment and techniques for execution.* The decision as to the time of termination is made by the immediate superior of the amphibious task force commander.⁴⁴¹

This limited conception of the ‘consolidation phase’, which only seemed to include the *beginning* of the ‘tactical and logistical buildup’, would turn out to be one of the central areas of contention between the Army and the Naval Service. The former simply believed that the latter’s concept of ‘amphibious operations’, which was based largely on the ‘seizure’-type assaults in the Central Pacific, was far too narrow and limited. The Army argued that any termination of a large-scale amphibious operation against a continental land mass (*i.e.*, ‘invasion’), particularly against the Soviet Union, had to occur after the *end* of any ‘tactical and logistical buildup’ as had occurred in Europe.

Marine Corps (Amphibious) Doctrine Development

Even prior to the Navy’s continuing effort to improve its amphibious doctrine, the Marine Corps had embarked on a more all-encompassing yet focused course to concentrate on amphibious operations’, specifically from the landing force perspective. This began on 1 February 1950, when a Marine Corps Board issued a study that was considered ‘the genesis for the...system of coordination of amphibious developmental activities’.⁴⁴² Citing the legal responsibilities accorded the Corps through the NSA of 1947, the report analysed the current status of the Marine Corps’ efforts and responsibilities with regard to the development of amphibious landing forces, and concluded that

⁴⁴⁰ See Lorelli, John A., *To Foreign Shores: US Amphibious Operations in World War II* (Annapolis, MD: NIP, 1995), 43-57, 295-306.

⁴⁴¹ DON, NWP 22, 1—8. Emphasis added.

⁴⁴² ___, ‘Marine Corps Research & Development Organization and Functioning’, [1970] (HAF 677, Box 38; AB, MCRC), 1.

[t]he field is now too large and complex to be left to itself. The Army and Navy are actively exploiting their adverse interests. There is a serious need for standardization; [and] there is a need for providing specifically for a means of Army and Air Force participation and means must be provided for the Commandant to exercise an authority imposed by law'.⁴⁴³

As such, it was recommended that both a 'Landing Force Center' and a 'Landing Force Development Agency' be established at Marine Corps Schools (MCS), Quantico.⁴⁴⁴ This led to the creation of the Marine Corps Education Center (MCEC) and the Landing Force Development Center (LFDC).⁴⁴⁵ To supervise and coordinate these new entities and their efforts, the Commandant, MCS, was assigned the 'additional duty as Coordinator of Landing Force Development Activities', later the CMCLFDA.⁴⁴⁶

Whilst the MCS was being reorganized, the Marines had edited and expanded their groundbreaking 'PHIB' series pamphlets,⁴⁴⁷ first re-titling them Amphibious Manuals (AMs) and, later in 1952, Landing Force Manuals (LFMs).⁴⁴⁸ The LFMs were shortly thereafter supplemented by Landing Force Bulletins (LFBs), a doctrinal series designed for longevity in which the Marine Corps would present their most revolutionary ideas.

After the promulgation of the new NWP series, however, which included 'advanced techniques and certain changes', the CMC initiated a complete review of the LFM series by the two FMF Commanding Generals in the Atlantic and Pacific (otherwise known as CG, FMFLant and CG, FMFPac). In apparent acknowledgement of the significant differences between the techniques used in the Pacific and Atlantic during World War II, the CMC divided the LFMs between the CG, FMFPac, and CG, FMFLant, according to the specific subject matter and techniques that had characterised the respective theatres. Although many titles were naturally applicable to both, those more closely associated with 'seizures'—such as LFM 4, *Ship-to-Shore Movement*, LFM 15, *Reconnaissance*, and LFM 17, *The Employment of Amphibious Vehicles*—

⁴⁴³ MCB, Memorandum for Executive Director, MCB, 2/1/50 (HAF 677, Box 38; AB, MCRC), 5.

⁴⁴⁴ MCB Memorandum, 12.

⁴⁴⁵ CMC ltr to CMCS, 10/16/50 (HAF 677, Box 38; AB, MCRC), 1-4. See also __, 'The Marine Corps Schools', n.d. (HAF 677, Box 38; AB, MCRC).

⁴⁴⁶ CMC ltr to CMCS, 1-4.

⁴⁴⁷ This series had 31 titles, 29 of which were promulgated, including the famous *PHIB-31, Employment of Helicopters (Tentative)*, 1948.

⁴⁴⁸ See MCS, *AM-1, Training, 1951* (AM Publication Series; Library, MCHC).

were sent to the former; those more closely related to ‘invasions’—such as LFM 9, *Field Artillery*, LFM 12, *Shore Party*, LFM 13, *Engineers*, and LFM 20, *Logistic Support (Including Personnel)*—were sent to the latter.⁴⁴⁹

Naval Development of the ‘Concept of Future Amphibious Operations’

Initial Concepts and Exercises, 1950-1952

The Marine Corps’ ‘concept of future amphibious operations’ actually had its roots in a 1950 *Equipment Policy* paper, the central tenets of which remained in place until the December 1955 promulgation of LFB 17, *Concept of Future Amphibious Operations*, which was the official, CNO-approved, long-term objective of the Marine Corps.⁴⁵⁰ The *Equipment Policy* paper’s key components were as follows:

1. Emphasis on tactical surprise, featuring a vertical envelopment by helicopter...
2. Commencement of the assault proper with the launching of assault troops in helicopters and amphibian vehicles from ships underway...
3. Landing of helicopter forces in landing zones...
4. Landing of further troop components by amphibian vehicles...[and]
5. Early logistic support following the pattern of the assault itself, using helicopters...and amphibian vehicles and trailers...⁴⁵¹

After being tasked by the CMC, the MCS investigated the various developmental aspects required to implement the aforementioned concept, producing two interim reports in January and February 1951, respectively. The first focused on all aspects of helicopter assault forces, techniques, and ship types. The second concentrated on research and procurement of the helicopters and ship platforms. As a result, an aggressive commissioning schedule was proposed to establish six helicopter squadrons by September of 1952 in order to test the new concept. In terms of platforms, various shipping options were considered for use, including certain cargo ships (*e.g.*, APAs and AKAs), the LSD, the LST, seaplane tenders, and aircraft carriers, the last of which was determined to be the most desirable, in modified form, along with possibly a specifically-designed helicopter and troop ship.⁴⁵²

⁴⁴⁹ ___, MC Memorandum Number 20-54, 1.

⁴⁵⁰ See HQ, USMC, LFB Number 17, *Concept of Future Amphibious Operations*, 12/13/55 (HAF 453, Box 21A; AB, MCRC).

⁴⁵¹ Rawlins/Sambito, 48-49.

⁴⁵² Rawlins/Sambito, 49-51.

A series of exercises was arranged for early 1952 based on the above reports to test the 'vertical envelopment' concept. The first of these, HELEX I, was conducted in late January and comprised an amphibious 'field exercise' in which the escort carrier USS *SIBONEY* (CVE-112), with 20 HRS-1 helicopters and a Marine battalion of 700 men embarked, landed the latter element ashore plus its 'combat cargo' in six and one-half hours. A second, almost identical exercise, HELEX II, was conducted in late February, again with the *SIBONEY* and again landing the same troop element in about six hours.⁴⁵³ Whilst a number of conclusions were reached, the most significant was 'that the CVE 105 class carrier can adequately handle aircraft, personnel and logistic support to launch vertical envelopment from the sea' but the idea of employing a 'Helicopter Transport' ship with a 'Helicopter Troop Transport' simultaneously was 'considered tactically unsound at the present time'.⁴⁵⁴ A separate study, conducted in March, concluded that the CVE-55 class escort carrier, with minimal modifications, was also 'suitable for helicopter operations using the present HRS helicopters' (which could transport 8-10 troops each).⁴⁵⁵

A number of specific problems concerning cargo lift and ship platform suitability still required resolution,⁴⁵⁶ so additional exercises continued that were generally part of a broader amphibious and land warfare training regimen for Marine units. On the one hand were the annual joint CAMID exercises, which remained largely as conventional assault demonstrations and often included Army paratroop drops.⁴⁵⁷ On the other hand were such exercises as TRAEX I and II held in June and November of 1952, respectively, in which helicopter assaults were conducted as part of larger conventional amphibious landings. The focus of these latter types of landings concerned the early link-ups between conventional and helicopter-landed forces as well as the

⁴⁵³ MG Field Harris, USMC, Ser 00104 to CG, FMFLant, 4/7/52 (EF: Box 44; AB, MCRC), 1-3. See also MG Field Harris, USMC, Ser 0037, to CG, FMFLant, 2/15/52 (RG 127: RRO&E, Box 21; NARA), 1-4.

⁴⁵⁴ MG Field Harris, USMC, Ser 00104, 3-10.

⁴⁵⁵ CG, FMFLant, Ser 0044 to CINC, US AtlFlt, 2/21/52 (RG 127: RRO&E, Box 21; NARA), 1-2.

⁴⁵⁶ CG, FMFLant, Ser 00116 to CNO, 4/16/52 (EF: Box 44; AB, MCRC), 1-2.

⁴⁵⁷ See CTF 106, 'Operation Order: ComPhibLant 14-50' [CAMID V], 5/9/50; TG 106.1 Training Group and ComPhibTraLant, 'Operation Order: ComPhibTraLant No. 2-50' [CAMID V], 7/31/50; and CTF 42, Commander AF, 'Operation Order: ComPhibLant 34-51' [CAMID VI], 5/10/51 (EF: Box 41; AB, MCRC). See also 1/6 Marines, 2nd MarDiv, FMF, 'Operation Order Number 1-52: MARLEX' [CAMID VII], 5/15/52 (EF: Box 44; AB, MCRC); and AF, US AtlFlt, TE 85.12 and ComNavPhibTraUnitLant, 'Operation Order: COMNAVPHIBTRAUNITLANT No. 9-52' [CAMID VII], 5/8/52 (EF: Box 46; AB, MCRC).

testing of anti-mechanized defence tactics, techniques, doctrine and equipment for the latter elements since they were extremely vulnerable to enemy counter-attack once landed inland.⁴⁵⁸

Ultimately, most exercises during this period tended to focus on testing the helicopter in the ship-to-shore movement, one notable example being PHIBEX 1-53, in which two squadrons of helicopters moved a full battalion of troops.⁴⁵⁹ A number of other exercises, however, were more specialised as they experimented with different times and climates. Examples included NILEX I, a night exercise conducted in July 1952; AIRLEX I and II, desert exercises conducted in September 1952 (in Nevada) and February 1953 (in California), respectively; and NORAMEX II, a December 1952 cold weather exercise in Labrador, Canada, which comprised a joint helicopter and conventional ship-to-shore raiding operation.⁴⁶⁰

Still other exercises experimented with operating in an atomic environment, which was by far one of the most important factors in developing the 'concept of future amphibious operations'. PHIBEX I, a division-size landing operation that was conducted Camp Pendleton, California, in early October, 1952 included the transport by helicopter of a battalion after a simulated atomic bomb was dropped to clear the helicopter landing zone.⁴⁶¹ This was followed by exercises DESERT ROCK V and VI, which were held in the Nevada desert in 1953 and 1955, respectively, and where small contingents of marines were flown into an actual atomic drop zone within hours of detonation.⁴⁶²

At the same time that these various exercises were being conducted, the US Marine Corps continued to develop and refine helicopter assault doctrine, a process that had apparently lagged behind since the release of its groundbreaking PHIB-31 in 1948. The first significant publication came out almost immediately following DESERT ROCK V, in April 1953, and was

⁴⁵⁸ Appendices 2 & 4 of Umpire Control Director, FMFLANT, Document No. 1 to CG, FMFLant, 7/9/52 (RG 127: RRO&E, Box 27; NARA); HQ, FMFlant, 'Change No. 5 to Operation Order Number 9-52: TRAEX II', 10/14/52; Commander AmphGp Four (CTG 42.2) Serial 0138 to Commander AF, US AtlFlt (CTF 42), 12/12/52; and Commander AF, US AtlFlt, Serial 073 to CINCLantFlt, 1/26/53 (EF: Box 44; AB, MCRC).

⁴⁵⁹ [A/CS, G-3], ['Evaluations of Exercises'], [3/54] (RG 127: GSF, Box 11; NARA), 8-9.

⁴⁶⁰ ['Evaluations'], 7, 9-10, 12-13. See also various correspondence (EF: Boxes 28, 45; AB, MCRC).

⁴⁶¹ ['Evaluations'], 10-12; R. D. Taplet, Ser 0-39-52 to Director, MCEC, 12/2/52. See also HQ, FMFlant, 'Change No. 5 to Operation Order Number 9-52: TRAEX II', 10/14/52 (EF: Boxes 45, 44; AB, MCRC), C-2.

⁴⁶² CG, FMFPacTroops, Ser 0011 to BG Wilburt S. Brown, USMC, 2/27/53 (EF: Box 48; AB, MCRC); and ['Evaluations'], 16-17. See also Clifford, *Progress*, 85.

titled LFB 4, *Interim Doctrine for the Tactical Employment of Transport Helicopters*.⁴⁶³ This document first described how the helicopter introduced a number of new characteristics that were going to be fundamental to future amphibious assaults. Most important were ‘the rapid concentration of troops on shore from dispersed forces at sea, a greater element of surprise, increased depth of operation, and improved mobility and flexibility’. It also summed up the helicopter’s key tactical advantages, most significantly ‘its ability to circumvent enemy defences and to land in undefended or lightly defended areas’. Having outlined these advantages, however, the manual notably stipulated that helicopter landings were only a *part* of the amphibious assault, and not the main part at that: ‘[H]elicopter landings do not, and will not in the foreseeable future, entirely supplant conventional amphibious landings.... Helicopter assaults will normally be conducted in conjunction with conventional surface assault and link-up of the two forces should be effected within a period of 72 hours’.⁴⁶⁴

The Evolution of the ‘Concept of Future Amphibious Operations’

What was perhaps conflicting with the ultimate approval and promulgation of this helicopter assault doctrine was the parallel development of the ‘concept of future amphibious operations’ which, by the end 1955, was in the final stages of being finalised and approved by the CNO. Dissatisfied with these only gradual advances in concept development, the CMC, in January 1953, directed the CMCS to establish a ‘special study group of highly experienced Marine officers to expand upon the 1951 concept’.⁴⁶⁵

Plans and guidance for this so-called ‘Advanced Research Group’ (ARG) were initially drawn up by the Policy Analysis Division of HQMC, which outlined ‘eight proposed projects’ for the Group to undertake.⁴⁶⁶ Three projects were selected, including ‘Project I’, which was presented as follows:

⁴⁶³ HQ, USMC, LFB Number 4, *Interim Doctrine for the Tactical Employment of Transport Helicopters*, 4/26/53 (HAF 481, Box 24; AB, MCRC).

⁴⁶⁴ LFB Number 4, 1—1.

⁴⁶⁵ Rawlins/Sambito, 62. See also CMC ltr to CMCS, 4/22/53 (RG 127: RRMOT&O, Box 10, File 4, Part 2; NARA), 1.

⁴⁶⁶ Head, Policy Analysis Division, Memorandum to C/S (G-3), 2/2/53 (RG 127: File 4, Part 1; NARA), 4.

Develop a concept of future (within the next 10 years) amphibious operations that will require maximum utilization of the Fleet Marine Forces as a mobile force in readiness. Based on this concept determine the validity and adequacy of current tactical doctrines, organization, equipment development policies and training programs within the Marine Corps.⁴⁶⁷

The ARG submitted its final report to the CMC on 24 March 1954, the central tenets of which were subsequently ‘approved’ by the CMC ‘as the long range objective of the Marine Corps’⁴⁶⁸ and presented to general officers at a conference held at USMC Headquarters in July.⁴⁶⁹ The core of the presentation (and the concept) revolved around an ‘appraisal of new developments’ in US capability that were expected in the near future, including: the mass availability of nuclear weapons, both ‘air delivered’ and ‘organic to Ground Forces’; new long- and medium-range ‘heavy attack’ and ‘attack’ aircraft with atomic weapon delivery capabilities; new helicopters with payloads and operating ranges of 12,500 pounds and 100 nautical miles, respectively; ‘electronics’ for an ‘all-weather close air support’ capability; and, finally, ‘guided missiles...for air defense...for artillery augmentation...[and] for other surface-to-surface use’.⁴⁷⁰ The full effects of these developments, combined with the employment of ‘high speed’ Amphibious Task Forces as well as Fast Carrier Task Forces, would ultimately provide ‘the Marine Corps the capability to lift and support, *wholly by helicopter*, all Landing Force elements required for the amphibious assault in an atomic war’.⁴⁷¹

The concept was tested first through the re-instatement of the PACKARD series of command post exercises (CPXs) at Quantico and Camp Lejeune, North Carolina.⁴⁷² PACKARD V and PACKARD VI, conducted in May of 1954 and 1955 respectively, simulated large-scale amphibious assaults of ‘corps size’ whilst using atomic weapons, with the former also introducing the Navy’s ‘Sea Echelon Concept’, which aimed ‘to achieve greater dispersion and

⁴⁶⁷ CMC ltr to CMCS, 4/22/53.

⁴⁶⁸ CMC ltr to CMCS, CG, FMFLant, and CG, FMFPac, 4/27/54 (HAF 689, Box 38; AB, MCRC), 1.

⁴⁶⁹ [HQ, USMC], ‘A Summary of the General Officers’ Conference held at Headquarters US Marine Corps, 14-16 July, 1954’, [7/55] (RG 127: VHQMCD, Box 2, [File b]; NARA).

⁴⁷⁰ ‘Summary’, 32-36.

⁴⁷¹ ‘Summary’, 35.

⁴⁷² See Chapter 1.

simplify mine sweeping problems'.⁴⁷³ At the same time, the Marine Corps' 'air-ground task force' organisational concept, which was seen as the primary method to enhance the marines' 'force-in-readiness' mission, was also tested.⁴⁷⁴ This began with the activation of the '2d Marine Air-Ground Task Force' on 21 December 1953 by the CMC, and was soon followed at the conceptual level by 'Project III' of the 1953-54 ARG. As a result of these efforts, the CMC approved a new organisational objective, which was to provide 'a task force commander with an integrated headquarters' whenever combat air and ground elements were deployed together for 'all foreseeable conditions of combat'. According to the Commandant, this concept was, in fact, 'considered a significant factor in the ultimate realization of the Marine Corps concept of future amphibious operations'.⁴⁷⁵

At the tactical level, this enhanced the integration of the 'combined arms' concept upon which FMF units were organised, deployed and employed. In comparison, the Royal Marine Commandos did not have such an organisational capability. Although they could veritably be considered as amphibious assault infantry, they had to rely not only on the Army for their 'combined arms' ground support but also on RN and/or RAF aviation for air transport and support.

With these various procedures underway, a second ARG was formed for the 1954-55 academic year and assigned its research projects.⁴⁷⁶ Final reports were presented sequentially to various Marine Corps general officers in December, 1954, and in March, April, and June of 1955, respectively.⁴⁷⁷ Even before the final presentation, however, the Marine Corps seemed to have made a significant breakthrough in its concept development when, at the Navy Department's annual Amphibious Warfare Conference in May, it was concluded that the 'Marine

⁴⁷³ See various correspondence for these respective exercises (EF: Boxes 50, 51; AB, MCRC).

⁴⁷⁴ CG, FMFPac Serial 00107 to CMCS, 11/23/50; and HQ, FMFPac, Staff Study, 'The Establishment of a Balanced Fleet Marine Force Air-Ground Force in the Western Pacific', 10/19/50 (HAF 742, Box 40; AB, MCRC).

⁴⁷⁵ [MCS], 'Suggested Mailing List – Phib Series', n.d. (HAF 463, Box 21A; AB, MCRC), 1-2; and __, 'Extracts from: CMC ltr A-49/AT-1938 dtd 7 July, 1954, to C/S HqUSMC, Subj: ARG Project III "Air-Ground Relations"' (HAF 688, Box 38; AB, MCRC), 2.

⁴⁷⁶ __, 'Advanced Research Group', n.d. (RG 127: C&RR, Box 10, #1-58; NARA), 1.

⁴⁷⁷ C/S, ltr to AC/S, 2/7/55; and C/S, Memorandum to Distr., 2/14/55 (RG 127: RRMOT&O, Box 10, File 6, Part 2; NARA).

Corps concept of all helicopter assault is now accepted by the amphibious people of the Navy as the goal to shoot for'.⁴⁷⁸

Indeed, an LFB had already been in the course of preparation since January 1955, which was finally promulgated on 13 December. Titled *Future Concept of Amphibious Operations*, this document marked the culmination of a conceptual formulation process that had begun in the late 1940s. The 'central features' of the concept did not differ appreciably from past articulations and only touched on the fact that it would apply 'under conditions of nuclear and non-nuclear warfare', which seemed notable considering the Marine Corps' overall identity as America's global 'force-in-readiness'.⁴⁷⁹ Instead, the most stress was placed on the futuristic aspect of the concept, which had 'as its ultimate goal an all-helicopter assault'. However, the LFB was quick to point out that, in fact, current progression had reached a stage where the amphibious assault involved 'a powerful two-pronged attack, one prong a vertical envelopment by helicopter, the other a surface assault across the beach by conventional means, *with the latter constituting the main effort*'.⁴⁸⁰

It was with regard to this last issue that the most controversy arose, particularly with the Army, which still saw the Marine Corps' concept as being too limited when facing a first-class, continental enemy like the Soviet Union with its mobile heavy armour and mechanised forces. It all seemed to come down to a difference in basic philosophies, which was exemplified by the geo-strategic competition between 'sea power' and 'land power', with the former—through this new concept—having apparently gained the upper hand. From the Navy's perspective, as the United States now generally enjoyed 'control of the seas'—in the same way as the British had during the Napoleonic Wars—the country therefore seemed to be on the verge of a new 'era', mostly due to changes in 'sea power'. As a result, '[t]he fleet which formerly based itself on land and projected its power on the sea is now capable of basing itself at sea and projecting its power

⁴⁷⁸ AC/S (G-3), memo to C/S, 5/17/55 (RG 127: RRMOT&O, Box 10, File 6, Part 5; NARA), 1-3.

⁴⁷⁹ See LFB Number 17, 3; and Utgroff, V., 'Seaplane Assault', *USNIP*, 79:8 (8/53), 881-885; and Bengé, Howard, 'Consider This Concept', *MCG*, 38:6 (6/54), 54-59.

⁴⁸⁰ LFB Number 17, 3-4. Emphasis added.

beyond the seas to wrest from the Reds control of vital rimlands of the Eurasian continent. The balanced fleet can do this because it has amphibious forces'.⁴⁸¹

It was this last sentiment that the Army saw as being fundamentally flawed. Against a foe such as the Soviet Union, the Army argued, heavier weapons and equipment, which could not be transported by helicopter—let alone by air at all—were an absolute requirement in cases of large-scale, 'joint amphibious operations' (or 'invasions'). Although this was not quite true for limited interventions in which *rapid* reaction by a light force was most important, it was this underlying difference that had caused (and continued to cause) such a divergence in approach towards concept development. As will be seen below, this was most starkly evidenced by the failed attempt by the Services to promulgate joint amphibious operations doctrine during the early and mid-1950s.

Equipment Development

The culminating evolution of naval development of 'amphibious operations' that occurred during the period 1950-1957 involved the procurement of various transport (assault) helicopters as well as the introduction of the first helicopter (assault) carrier. With regard to the procurement of helicopters, by mid-1953, the nine squadrons of helicopters (mostly HRS-types) then in existence had a combined lift capability to transport 'an infantry regiment in an amphibious operation...'. With the anticipated introduction of the much larger HR2S-1 model, this capability would increase to landing 'three Regimental Landing Teams', each of which with an 'additional battalion of 105mm howitzers with ¼ ton 4x4 trucks (jeeps) as prime movers'.⁴⁸² At the time, the Marine Corps desired to have this capability in place by the end of 1957.⁴⁸³ However, due to technical and financial reasons, the procurement numbers were reduced 'from a total of 158 aircraft in June 1955 to only 34 by November the same year'.⁴⁸⁴ Indeed, a

⁴⁸¹ C/S, HQ, USMC, 'Presentation of Marine Corps Concept of Amphibious Operations', 12/19/55 (RG 127: RRDAWD, Box 1, File 1; NARA).

⁴⁸² Director of Aviation, memorandum to CMC, 9/18/53 (RG 127: QS/VCMCD/VKI, Box 1, [File a], Part 1, Tab 2; NARA), Enclosure (1).

⁴⁸³ Op-52, Memorandum to Op-50, 4/14/53 (RG 127: RRPPA&AO, Box 1, File 4, [Part A]; NARA).

⁴⁸⁴ Rawlins/Sambito, 68-69.

comparison of ‘desired’ helicopter numbers and actual numbers ‘on hand’ for the period 1954-56, reveals that the USMC suffered not only with regard to total numbers but also with respect to the particular types.⁴⁸⁵

Although the procurement of amphibious shipping appeared not to fare much better, this only really applied to the particular requirement for transport helicopters. In fact, it was not until 1956 that the USMC would receive their first helicopter carrier. In 1951, the original class of carrier chosen for conversion into a helicopter carrier, the *Commencement Bay* class (CVE-105), was found to be unavailable due to higher priority anti-submarine warfare requirements. Instead, the *Casablanca* class (CVE-55) was found suitable (with even more speed) and available (in the reserve fleet).⁴⁸⁶ It was just such a vessel, the USS *Thetis Bay*, that was chosen to be the first conversion. Re-designated as CVHA-1 (Carrier, Fixed-Wing, Helicopter, Assault), the ship underwent a year-long conversion and was commissioned on 20 July 1956; she was re-designated as LPH-6 (Landing Ship, Personnel, Helicopter) on 30 January 1959. Her modifications included berthing for 1,000 marines (plus a crew of 540), the removal of all 5-inch and 20mm guns but the retention of eight twin-40mm guns.⁴⁸⁷ The only other major amphibious shipping that was added to the Navy Lists in the 1950-57 timeframe comprised eight LSDs of the new *Thomaston* class, and a total of fifteen LSTs of the new *Terrebonne Parish* class.⁴⁸⁸

In sum, although the Navy Department—mostly through the efforts of its Marine Corps—had successfully developed and adopted a new ‘concept for future amphibious operations’, limited resources (relative to other defence priorities) effectively precluded the concept from being realised. This was due specifically to the lack of enough transport helicopters not to mention also the lack of helicopter assault shipping, both of which were required. As will be seen in Chapter 5, this pattern initially seemed to be on the verge of repeating itself. Whilst

⁴⁸⁵ See Op-52 Memorandum, Enclosure (2); and Rawlins/Sambito, Appendix E.

⁴⁸⁶ Rawlins/Sambito, 51.

⁴⁸⁷ McCarton, Matthew, ‘The Evolution of the Helicopter Carrier’, unpublished monograph Surface Ship Design and Engineering Directorate, Total Ship Concepts Division, NAVSEA, 3/98 (NL, NHHC), 24-25.

⁴⁸⁸ McCarton, B-1, Appendix B. See also ‘Dictionary of American Fighting Ships’ at <http://www.history.navy.mil/danfs/index.html>.

the Marine Corps was able to reorganise its Fleet Marine Force by 1958 to comport to the new concept, delays in the procurement of both helicopters and (especially) helicopter assault carriers, still prevented any significant progress in the concept's implementation. It was not until the 1960s, when both of these latter assets entered service in minimal numbers, that the concept could be fully tested and implemented.

(Joint) Development of 'Joint Amphibious Operations' (or *Expeditionary Warfare*)

As the Naval Service, particularly the Marine Corps, focused on adapting 'vertical envelopment' by helicopter to future 'amphibious operations', the Army and, to a lesser extent, the Air Force, continued to formulate and present their alternatives to the Naval Service's approach, arguing that their concept of 'joint amphibious operations' (or *expeditionary warfare*) was more appropriate—and ultimately more probable—against a Soviet-occupied Eurasian continent. The two services based their views on the significantly different wartime experiences in the European and Pacific theatres during World War II. This debate had evolved into one involving 'joint amphibious operations' on the one hand (representing 'invasion'-type operations) and 'amphibious operations' on the other (representing 'seizure'-type operations).

The Joint Amphibious Board and 'Divergent Views'

With the promulgation of the *Joint Action Armed Forces* in September 1951, which replaced *Joint Action of the Army and Navy* of 1935 (with changes), a number of joint boards were established to address the intricacies of various types of joint operations. These included 'joint amphibious operations', which were the purview of both a Joint Amphibious Board (JAB), responsible to the CNO (as agent of the JCS), and a Joint Landing Force Board (JLFB), responsible to the CMC (also as agent of the JCS).⁴⁸⁹

Due to the fact that the JAB dealt with broader concepts involving amphibious warfare and the JLFB focused on more of the specific tactics, techniques, procedures and equipment requirements for landing forces, the former was ultimately the more significant with respect to the overall development of amphibious/expeditionary warfare in the US. By far its most

⁴⁸⁹ See various correspondence (RG 127: RRPPA&AO, Box 3, File 16, Tabs 10, 11; and Box 8, File 11; NARA).

important endeavour was Formal Project No. 1-52, 'Doctrines and Procedures Governing Joint Amphibious Operations', which was an inter-service attempt to formulate an agreed doctrine for joint amphibious warfare. After over a year of work the JAB failed to arrive at a consensus and, under final direction from the JCS, the CNO requested that 'a divergent views report' be produced 'setting forth all divergent Service views encountered which are delaying finalization of a joint acceptable solution', whilst also specifically isolating those differences involving 'the areas of concept, command, employment and control'.⁴⁹⁰ A final report was submitted quickly on 15 January 1954.⁴⁹¹

The central difference between the Naval Service and the Army, which had been evolving since the late 1940s, centred on the actual conception of what an 'amphibious operation' or a 'joint amphibious operation' was. This, in turn, shaped almost every other aspect of the debate, including such vital areas as command and organisation as well as employment and control. Indeed, it is interesting to point out the basis of the Army's main variance with the Naval Service here, which not only stemmed directly from the position arrived at by 1950 but also almost exactly copied the stance taken by the so-called 'RAW Committee' in the United Kingdom when the latter rejected establishing a corps of amphibious specialists along the lines of the Marine Corps. As the document outlined,

[t]he amphibious assault is not a special form of operation requiring a specialized assault force which is to be replaced after the assault objective has been achieved. To assure economy of means, assault forces must, therefore, be organized, trained and equipped on the basis of least possible deviation from the organization, tactics and equipment normally employed in land operations.⁴⁹²

The Army simply believed that amphibious assaults sometimes fell within the realm of land warfare. More specifically, 'when the joint amphibious operation is a step in the development of large-scale land operations, it cannot be separated from the land campaign; the amphibious operation is an essential step in development of the land campaign'. Along these lines, the

⁴⁹⁰ Enclosure A (12/23/53) to JAB, 'Doctrines and Procedures Governing Joint Amphibious Operations, with Divergent Service Views; report on Project No. 1-52', 1/15/54 (MHI Stacks: U261.U54; Library, AHEC).

⁴⁹¹ 'Doctrines', 1/15/54.

⁴⁹² SAR [JAB], Memorandum, ['Joint Amphibious Operations'], 1/27/52 (RG 127: VHQMCD, Box 2, File [e]; NARA), 1.

document also noted that ‘the Service having fundamental responsibility for the exploitation must have the dominant responsibility’ in the amphibious phase itself.⁴⁹³ Not surprisingly, this basic position would remain effectively unchanged throughout the Board’s existence.

From a purely conceptual point of view, the Naval Service considered the ‘joint amphibious operation’ from a more narrowly *tactical* and strictly *naval* sense. In fact, it ultimately made no distinction between the ‘amphibious operation’ and the ‘joint amphibious operation’. This was done by emphasising first, that ‘[u]nity of command on the tactical level over all forces...is essential’, and second, that ‘the exercise of command over the forces executing the landing...is a Navy function’. The Army, however, saw the ‘joint amphibious operation’ in a much broader context, arguing that although it ‘may be an incident of a land, naval, or air campaign’, it was ‘essentially integral to the land campaign’. In addition, the ‘distinguishing characteristic’ of such enterprises was ‘that of joint action by significant elements of the Army and Navy’ which, while requiring ‘[e]xtensive air participation...including possible limited landings by airborne troops’, could also involve the use of Air Force elements ‘to provide some or all of the air effort’ with Fleet Marine Forces perhaps ‘required to supplement the landing force’.⁴⁹⁴ Ultimately, this viewpoint focused on the large-scale land campaign (or ‘invasion’), which required the forces from at least two, if not all three, of the major services to initiate.

The Naval Service’s narrower conception of the ‘joint amphibious operation’ was more clearly revealed by its perception of the so-called ‘Extent of the Operation’ (or ‘Phases of the Operation’).⁴⁹⁵ Whilst both the Naval Service and the Army generally agreed that there were three primary purposes of an amphibious attack, including the attainment of land areas ‘to carry our further combat operations ashore’, to ‘[o]btain...[advanced] air or naval base area[s]’, or to ‘[d]eny the use of seized positions to the enemy’, the Naval Service believed that the first type simply involved the seizure of a ‘beachhead’ just like in any other ‘amphibious operation’, unlike

⁴⁹³ Memorandum, 2.

⁴⁹⁴ ‘Doctrines’, B-i, B-8, B-14, B-15.

⁴⁹⁵ ‘Doctrines’, B-8, B-17.

the Army, which required a ‘lodgment area’.⁴⁹⁶ Although these two different terms were not defined in the report, the various phases of a ‘joint amphibious operation’, as outlined by the Naval Service and the Army, respectively, illustrated a fundamental variance. For the Naval Service, the phases of what amounted to a straightforward tactical (naval) operation included ‘Planning and Preparation’, ‘Embarkation’, ‘Rehearsal’, ‘Movement to the Objective’, ‘Pre-assault Operations’, ‘Attack and Capture of the Objective’, and ‘Consolidation’. For the Army, the phases of what amounted to the initiation of a joint, large-scale (*i.e.*, operational-level) land campaign generally consisted of a ‘Preparatory Phase’, an ‘Amphibious Phase’, and a ‘Final Phase’, although each of these phases had a number of ‘sub’-phases. When all of the respective phases and sub-phases are listed side by side in comparison (see below), the fundamental difference in conception of a ‘joint amphibious operation’ becomes readily apparent.⁴⁹⁷

Phases of a 'Joint Amphibious Operation'	
Navy/Marine Corps	Army
(1) Planning and Preparation	(1) Preparatory Phase
• joint planning	• planning
• joint training	• training
• marshalling	• concentration and marshalling of forces
	• preparation of the objective
	(2) Amphibious Phase
(2) Embarkation	• embarkation of troops
	• loading of equipment and supplies
(3) Rehearsal	• rehearsals
(4) Movement to the Objective	• movement to the objective area
(5) Pre-assault Operations	• preassault actions
(6) Attack and Capture of the Objective	• assault and capture of the objective
(7) Consolidation*	• initial consolidation operations
	(3) Final Phase
	• tactical organisation and consolidation of the objective
	• establishment of facilities and development of the area for the purpose of supporting projected operations
* this includes when 'the force beachhead is made secure and the landing force is firmly established ashore'	

⁴⁹⁶ ‘Doctrines’, B-1 – B-2.
⁴⁹⁷ ‘Doctrines’, B-8 – B-10, B-17 – B-19.

As can be seen, the above display clearly accentuates the two main differences between the Naval Service's and Army's views: first, the predominantly *naval* versus *military/land* character of the enterprise; and second, the narrower *tactical* versus *operational* scope.

The variations between the Naval Service's and Army's conception naturally led to different approaches regarding organization and command although both entities agreed that the principle of 'unity of command' should be applied throughout and that a 'joint task force' type organization was required.⁴⁹⁸ However, as the Naval Service conceived of the 'joint amphibious operation' as a strictly tactical effort, it simply required the establishment of a 'Joint Amphibious Task Force' JATF (at the tactical level) to complete the enterprise 'in its entirety,...from its inception to its termination'. In addition, because most of this procedure was naval in character, command 'over the forces executing the landing and conducting the operations connected therewith' was deemed to be 'a Naval function; accordingly the commander of the Joint Amphibious Task Force will be a Navy officer'.⁴⁹⁹

The Army, on the other hand, required a Joint Task Force (JTF) to be established, complete with its own 'joint staff' at the operational level. Significantly, the commander of this force was to be 'selected based upon the Service having *dominant interest* in the mission of the joint amphibious operation'. Presuming that the operation was being conducted to initiate a land campaign, would obviously be an Army officer. However, as the Army accepted that there was an 'Amphibious Phase' to the 'joint amphibious operation', it also provided for the establishment of 'an amphibious task force....[with] command authority delegated to the amphibious task force commander' during that particular Phase. Whilst the landing force commander (and the 'commander of Air Force forces') generally functioned at the same level as the amphibious task force commander, the former was placed 'under the operational control delegated to the' latter

⁴⁹⁸ 'Doctrines', B-ii, B-25.

⁴⁹⁹ 'Doctrines', B-25 – B-31.

during the ‘Amphibious Phase’ until ‘the landing force commander can assume responsibility for all operations ashore’.⁵⁰⁰

In effect, the Army had inserted, due to the ‘complexity of the operation, [and] the multiplicity of forces involved’, an additional level of command, which treated the ‘amphibious phase’ (with its corresponding ‘Amphibious Task Force’) as merely one of many sequential stages involved in initiating and conducting a (large-scale) land campaign.⁵⁰¹ This was in keeping with the definition of an amphibious operation that was still in the ‘Functions Paper’, which referred to ‘the amphibious phase of a joint amphibious operation’. In addition, while the overall concept more closely resembled that of the British (as compared to the US Naval Service) the one big difference stemmed from the fact that, according to the Army’s command relationships, the task force commander exercised unity of command at the operational level, unlike the British system where a purely joint (*i.e.*, cooperative) system existed.

Perhaps surprisingly, it was the US Air Force’s (USAF’s) approach that most closely resembled that of the British in many respects. The Air Force believed that ‘joint amphibious operations’ were not only *operational* but also *tri-elemental* (if not perhaps *bi-elemental*) in essence, almost to the point of exclusivity, an attitude that reflected its nascent independence after a bruising battle over defence unification. Partly as a result, its position was unequivocally that ‘established doctrine for theater air operations has been tested in combat, and is applicable to all air operations conducted within a theater including air operations associated with an amphibious operation’.⁵⁰²

On the one hand, the Air Force generally agreed with the Naval Service’s *naval* characterisation of an amphibious operation being ‘an attack launched from the sea by ground and naval surface forces’. At the same time, however, it also seemed to accept the Army’s *operational-level* classification that the ‘amphibious operation is normally part of a campaign or a series of operations having an objective of great magnitude than that of the amphibious

⁵⁰⁰ ‘Doctrines’, B-25 – B-26, B-29 – B-31.

⁵⁰¹ ‘Doctrines’, B-35 – B-36.

⁵⁰² ‘Doctrines’, B-i – B-iii.

operation'. By specifically emphasising different aspects of each definition, the Air Force formulated its own unique operational and tri-elemental conception of amphibious/expeditionary warfare, which ultimately stipulated that *all* 'Air Forces (Air Force, Navy/Marine Corps, and Allied) participate *in conjunction with* an amphibious operation, similar to the manner in which air forces participate *in conjunction with* land operations'.⁵⁰³

With regard to the *naval* characterisation, the Air Force's emphasis was on the fact that the 'amphibious operation' was specifically a 'surface operation' and that it was 'but one of many related surface operations conducted within a theater in furtherance of the theater mission'. More significantly, the Air Force also claimed that '[t]he amphibious operation, like all other surface operations is not self sufficient; it does not include the air operations which make the amphibious operation possible'.⁵⁰⁴ This directly contradicted the Naval Service's position, which simply stated that an amphibious operation 'always includes Navy and landing forces, including their air elements' (although this concept did not preclude 'extensive Air Force participation and...limited landings by airborne troops').⁵⁰⁵ Indeed, the Air Force reinforced its opposing position by categorising the forces required to execute a joint amphibious operation into two (not three) basic types. On the one hand was the 'Amphibious Task Force', which was made up of 'Ground forces' and 'Naval forces' but specifically did 'not include any air forces in its organization'. On the other hand were 'Air forces', which comprised 'the full spectrum of air power in a theater', including the capability to perform such vital functions as 'interdiction', 'close air support', 'air lift', and 'helicopter'. Finally, the Air Force also referred to 'Airborne operations', which were considered 'not a direct part of an amphibious operation' although they could be executed 'in conjunction with an amphibious assault'.⁵⁰⁶ All of this served to separate all air forces (and their activities) from amphibious warfare operations so that they could be

⁵⁰³ 'Doctrines', B-1 – B-2. Emphasis added.

⁵⁰⁴ 'Doctrines', B-1 – B-6. Underlining in original.

⁵⁰⁵ 'Doctrines', B-1 – B-2.

⁵⁰⁶ 'Doctrines', B-1 – B-3, B-6, B-14 – B-16.

classified as performing ‘air operations’ that, far from being integrated into amphibious warfare operations, nevertheless could (and were to) be employed in conjunction with the latter.

The Air Force’s views toward the phases of an amphibious endeavour were also revealing. While it appeared to agree with the seven main phases of ‘an amphibious operation’ as outlined by the Naval Service, the Air Force specifically noted that ‘[a]ir operations conducted in conjunction with the amphibious operation will *not* follow the pattern of the amphibious operation’ as depicted by the Naval Service. Instead, it listed three loosely demarcated phases during which ‘air operations’ would be conducted, the first and second of which would begin with the ‘planning’ and ‘movement’ stages, respectively, and the third essentially beginning after the Naval Service’s ‘Consolidation’ phase (or at the beginning of the Army’s ‘Final Phase’).⁵⁰⁷

The fully independent (and inter-service) nature of the Air Force’s overall position with regard to amphibious/expeditionary operations, which most closely resembled those of the British, was finally reflected in the command and organisation structure as well as the employment and control arrangements. Concerning the former, the Air Force simply maintained that the ‘theater organization and command structure is sufficiently flexible to accommodate any and all joint or unilateral operations, including (joint) amphibious operations and the air operations associated therewith’. As such, a ‘single theater commander’, with his joint staff, would divide his forces under the control of ground, naval, and air force component commanders, by specifically assigning each of them ‘operational control...[of] forces operating in one medium’. This, plus the fact that the component commanders were deemed ‘co-equal and interdependent’, meant that the ‘theater air commander’ had effective control over all air forces in a specific theatre, albeit ‘in furtherance of missions and objectives of the theater’, as opposed to the specific accomplishment of the amphibious mission.⁵⁰⁸

The aforementioned structural arrangements were carried out through a parallel system of command relationships and organisation. Although the ‘theater organisational structure’ was

⁵⁰⁷ ‘Doctrines’, B-17 – B-19.

⁵⁰⁸ ‘Doctrines’, B-25 – B-27, B-42 – B-43.

re-emphasised, the possibility of creating a 'Joint Force' system did exist under the Air Force scheme. Ultimately, however, it had the same arrangement as that described above, 'that is, a single unified commander, a joint staff, and component commanders', although the commander of the joint force could be from 'any Service'. Finally, although an 'Amphibious Task Force' was also listed, which had a naval officer in command of a combination of ground and naval forces, it did 'not include any air forces in its organization'. In these cases, the participating 'air commander', who was presumably in command of all air forces associated with the amphibious operation, 'is always co-equal with the amphibious task force commander'.⁵⁰⁹

Army and Air Force Development of 'Joint Amphibious Operations'

The emergence of differing service views related to amphibious/expeditionary warfare as depicted in the 'divergent views' paper actually reflected a wider discrepancy amongst the Services as each tried pursue its own speciality of conducting modern warfare, whether at sea, on land or in air. As the Army was ultimately responsible for the conduct of land warfare, which had gained particular attention due to the destructive nature of (tactical) atomic weapons, it was perhaps not that surprising that it might also focus on those types of operations directly 'incident to land warfare' such as airborne and amphibious operations.⁵¹⁰ The Army did so in two ways, the first through the unilateral promulgation of amphibious doctrine and the second through the continued development of 'joint amphibious operations' (or 'expeditionary warfare') concepts. As in the late 1940s, both of these trends of development were very similar to the overall development of 'combined operations' in the United Kingdom.

Army Developments

Amongst the US Army branches that were involved in Army amphibious/expeditionary warfare development, two of the most notable were the Corps of Engineers and the Transportation Corps, both because they were the only Army branches that possessed any

⁵⁰⁹ 'Doctrines', B-29 – B-34.

⁵¹⁰ See, for example Doughty, Robert A. (Major, USA), *The Evolution of US Army Tactical Doctrine, 1946-76* (Ft. Leavenworth, KS: USA C&GSC, 1980) which, whilst covering airborne operations, does not mention amphibious warfare at all (although it does discuss 'strategic mobility').

amphibious vehicles and 'watercraft'. However, the Army agency that was generally responsible for the development of amphibious/expeditionary warfare concepts, doctrine and training, was the Army Field Forces (AFF, formerly Army Ground Forces but after 1955, known as Continental Army Command, or CONARC).⁵¹¹ Indeed, it was through the promulgation of uni-service amphibious-related doctrines that the Army's overall concept of amphibious/expeditionary warfare was best presented, particularly in comparison to that of the Naval Service and the Air Force, not to mention also the British.

By the 1950s the Army had apparently resurrected its 60- series of doctrinal manuals from World War II that now addressed 'Amphibious Operations'. They also seemed to replace the FM 31- ('Special Operations') series manual that included the last edition (1944) of FM 31-5, *Landing Operations Against Hostile Shores*. Two of these manuals, FM 60-5, *Amphibious Operations, Battalion in Assault Landings*, and FM 60-10, *Amphibious Operations, Regiment in Assault Landings*, promulgated in 1951 and 1952, respectively, were noteworthy because they were the first to collate the ideas and concepts that had evolved from Army thinking over the course of the late 1940s and also provide the foundation for the Army's positions that were articulated in the 'divergent views' paper of January 1954.⁵¹² These ideas and concepts were based primarily on the *expeditionary* experiences of the Army (and Air Force) in Europe during the Second World War in combination with the British, which had been mostly *military* (as opposed to naval) and *operational-level* (as opposed to almost purely tactical) in character. Another fundamental characteristic involved logistics, which was addressed specifically by two additional 60- series publication, FM 60-25, *Employment of the Amphibious Support Brigade*, published on 8 January 1952, and FM 60-30, *Amphibious Operations, Embarkation and Ship Loading (Unit Loading Officer)*, released on 6 September 1952.⁵¹³

⁵¹¹ For an overview, see Boose, 327-338.

⁵¹² See DA, FM 60-5, *Amphibious Operations, Battalion in Assault Landings*, 2/21/51; DA, FM 60-10, *Amphibious Operations: Regiment Assault Landings*, 1/18/52. Another manual, FM 17-34, *Amphibious Tank and Tractor Battalions*, was released on 6/1/50 (AHCO: Military Publications, AHEC).

⁵¹³ DA, FM 60-25, *Employment of the Amphibious Support Brigade*, 1/8/52 (AHCO: Military Publications, AHEC). For a brief summary of the 60- series manuals, amongst others, see also Boose, 328-329.

As discussed above, the Army's conception of amphibious/expeditionary warfare as centring mostly on large-scale 'joint amphibious operations' was revealed in the aforementioned manuals in a number of ways. The most obvious involved the definition that was repeated almost identically in three of the four publications, which simply stated that the main purpose of an amphibious operation was 'to achieve an objective on land'.⁵¹⁴ In addition, two of the manuals differentiated between the larger-scale 'invasion' and the smaller-scale 'occupation' or 'seizure', whilst also including the 'raid' and 'demonstration' (plus a 'waterborne envelopment' in one case).⁵¹⁵ Also revealing were almost identical descriptions of the distinctive 'Final phase' of amphibious operations, which specifically began with the 'end of the assault phase' and terminated 'when the normal logistical services of the Army and Air Force are established ashore'.⁵¹⁶ As has already been discussed above, this phase would set the Army's scope of a 'joint amphibious operation' apart from that of the Naval Service as the latter basically equated the ending of the assault phase with the termination of the whole amphibious operation. This particular variance, in fact, was better expressed by the Army's discussion of the 'pattern' of an amphibious operation, which included three distinct stages: 'Prelanding Operations'/'Preparation'; 'Landing'/'Assault'; and 'Consolidation', as illustrated previously.⁵¹⁷ Again, the Naval Service only seemed to be concerned with the first two whilst the Army focused on the last which, in turn, resembled the overall approach taken by the British.

Along these lines, the second revealing issue revolved around concept of 'dominant interest' as applied by the Services during the various phases of an amphibious landing, which reflected the importance of logistics relative to each of the four phases. The 'Preparatory' phase was considered to be of equal interest to 'all three Services' because it logically involved all of the Services. Although the Naval Service had dominant interest during the 'Movement phase' for obvious reasons, the Army deemed itself to have dominant interest during both the 'Assault' and

⁵¹⁴ FM 17-34, 3; FM 60-5, 1; and FM 60-10, 1.

⁵¹⁵ FM 60-5, 3-4; and FM 60-10, 4-5.

⁵¹⁶ FM 17-34, 4-8; FM 60-5, 8-11; and FM 60-10, 3-4.

⁵¹⁷ FM 60-5, 11-14; and FM 60-10, 5-6.

‘Final’ phases. With regard to the ‘Assault Phase’, the Army’s position was based on the fact that it was being supported by the Navy and Air Force in ‘the establishment of the force beachhead’. And whilst all three Services were to exercise ‘mutual tactical and logistical support’ during the ‘Final Phase’, the reason for the Army having dominant interest again stemmed from the need to seize objectives located outside of the beachhead and to consolidate them with ‘logistical operations’.⁵¹⁸

Other than FM 5-156, *Engineer Shore Battalion*, which was issued on 10 August 1954 and dealt with one of the organic units to the Engineer’s Amphibious Support Brigade (ASB),⁵¹⁹ the only other manual that covered amphibious operations in any great or important detail was the 1954 edition of FM 100-5, *Field Service Regulations, Operations*.⁵²⁰ The Army’s keystone operational manual, FM 100-5 outlined the degree to which the Army had evolved its thinking, not only with regard to land warfare in relation to naval and air warfare (or, ‘land power’ in relation to ‘sea power’ and ‘air power’) but also with respect to land warfare in relation to amphibious operations. Also notable was that this edition was the first to make up for some of the previous manuals’ major shortcomings, namely the lack of any discussion of the effects of atomic warfare on amphibious operations.⁵²¹

Whilst the subject of ‘Amphibious operations’ was included as a section in the ‘Special Operations’ chapter, as in previous editions of FM 100-5, some of the most significant language related to amphibious landings came in the ‘Introduction’ mainly because it was specifically aimed at securing the primacy of land warfare over sea and air warfare. In first setting out that ‘Army forces, as land forces, are the decisive component of the military structure’, the manual then proclaimed that ‘*Army combat forces do not support the operations of any other component*’. Instead, ‘because of their decisive capabilities, [Army forces] are supported from

⁵¹⁸ FM 60-5, 8-11; and FM 60-10, 3-4.

⁵¹⁹ DA, FM 5-156, *Engineer Shore Battalion*, 8/10/54 (AHCO: Military Publications, AHEC). See also Boose, ????.

⁵²⁰ DA, FM 100-5, *Field Service Regulations, Operations*, 9/27/54 (Library: FM Publication Series; MCHC). See also Boose, 329.

⁵²¹ FM 100-5, para. 173.b.1 (Change 2, 1956).

time to time by other military components as the nature of the situation may require...toward insuring the success of the land force operation'.⁵²²

This philosophy was applied to command relationships where it ultimately countered some fundamental positions of both the Naval Service and the Air Force. The basic issue involved the balance between unity of command and coordination of effort. On the one hand, while the Army seemed to agree with the Air Force on having unity of command at the theatre level, this was not the case at the tactical level—or even operational level, for that matter—where the Army required direct support. On the other hand, the Naval Service, whilst agreeing with the Army's assertion that unity of command was necessary at all levels, disagreed with the idea that it was in a supporting role to the Army in tactical situations.⁵²³

These exact command issues were reiterated in the 'Amphibious Operations' section of the manual and comprised another distinguishing characteristic with specific regard to amphibious operations.⁵²⁴ As previously emphasised, one of the 'Fundamentals' of joint amphibious operations involved vesting '[c]ontrol of Joint Forces...in one commander'. This commander, in turn, was to 'divide the operation into three successive phases', which ultimately stemmed from the phases that had been originally offered in the 'divergent views' paper and more closely followed the 'patterns' listed in the 60- series manuals discussed above. They included: '*Phase I—Planning and Preparation*'; '*Phase II—Embarkation, Movement, and Assault*'; and '*Phase III—Consolidation and Buildup*'.⁵²⁵

While the commander of the joint (task) force (*i.e.*, the one with the 'dominant interest in the overall operation') was responsible for all three of these phases of a joint amphibious operation, a special 'amphibious task force' was to be formed specifically to accomplish 'Phase II'. This force, whose commander 'should always be a naval officer', was to consist of both naval (including naval air) and ground elements as well as possibly 'Air Force tactical air

⁵²² FM 100-5, 4-5. Emphasis added.

⁵²³ FM 100-5, 6-7.

⁵²⁴ FM 100-5, 150-210.

⁵²⁵ FM 100-5, 179-181.

organizations'. Once Phase II ended, a number of changes were to take place, which included 'the landing force commander [reverting] to the direct operational control of the joint task force commander; the naval components...[assuming] the role of supporting the landing force; and the air components...[coming] under the operational control of the landing force commander'.⁵²⁶ As was already starkly evident in the 'divergent views' paper, all of these options ran counter to the positions taken by the Naval Service and Air Force and would not be fully resolved until more than a decade later.

Air Force Developments

Due to the fact that it did not have any doctrine even remotely related to amphibious operations—the closest being the air-ground doctrine that evolved during World War II—the US Air Force (USAF) started the decade with a clean slate in this regard. According to one analysis, even by late-1951, the Air Force had simply just 'not given much thought to amphibious warfare'.⁵²⁷ This was primarily due to the prioritisation of strategic atomic bombing over other forms of air power, coupled with 'limited funds, lack of training with the Army, and the failure to prepare for limited war', specifically in the late 1940s.⁵²⁸ Although the USAF's tactical air forces regained some of their World War II prominence in the early- and mid-1950s, culminating in the Composite Air Strike Force (CASF) concept of 1955, this expeditionary concept and capability was almost exclusively advanced in conjunction with the Army, thus avoiding amphibious-related operations altogether.⁵²⁹

However, the one exception with regard to amphibious-related development during the early and mid-1950s was in the field of doctrine. Indeed, by 1953, in a broad and comprehensive effort to produce a body of basic Air Force doctrine, a number of Air Force Manuals (AFMs) were promulgated, including AFM 1-5, *Air Operations in Conjunction with Amphibious*

⁵²⁶ FM 100-5, 183.

⁵²⁷ Futrell, Vol. I, 404.

⁵²⁸ See, Caddell, Joseph W., 'Orphan of Unification: The Development of United States Air Force Tactical Air Power Doctrine, 1945-50', Ph.D. dissertation, Duke University, 1984, 328.

⁵²⁹ See Martin, Jerome V., 'Reforging the Sword: United States Tactical Air Forces, Air Power Doctrine, and National Security Policy, 1946-1956', Ph.D. dissertation, Ohio State University, 1988; and May, Michael P., 'United States Air Force Expeditionary Airpower Strategy, 1946-1964', Ph.D. dissertation, Kansas State University, 2005, Sections [Chapters] 2 & 3.

Operations. By the end of 1954, a series of nine volumes had been finished, including a second edition of AFM 1-5, which was released on 1 April 1954, less than three months after the ‘divergent views’ paper had been completed.⁵³⁰

While AFM 1-2, *United States Air Force Basic Doctrine*, was the Air Force’s keystone manual, AFM 1-5 was based primarily on AFM 1-3, *Theater Air Operations*. This latter volume, while essentially focusing on the employment of air forces at the operational level of war, essentially served in the same role as the Army’s FM 100-5 text. It did so by also offering a completely opposing stance to the one proclaimed by FM 100-5 by promoting the type of military forces that were now considered the most decisive in modern war: ‘Air forces are more capable than any other theater force of producing decisive effects. Theater strategy, therefore, must be designed to create situations favorable to the exploitation of air force capabilities’.⁵³¹ This attitude was reflected in the ‘Command and Control’ arrangements that were prescribed for theatre forces in general and for theatre air forces in particular. First of all, unlike the Army, which claimed that its land forces did not support any other forces, the Air Force at least recognized that ‘[t]heater forces are organized and employed in accordance with the tenet of mutual support’. Second, and in an apparent slight against the Naval Service, the manual purported that, ‘[n]o one theater component is self-contained or capable within itself of achieving the theater mission’.⁵³² This appeared to question the Naval Service’s fundamental ability (and perhaps even authority) to undertake purely tactical operations on its own.

Having established these parameters, the manual set about defining the role of the theatre commander—along with his ‘combined or joint staff’—under the ‘principle of unified command...upon which the command system for theater operations is predicated’. Three component commanders operated under the theatre commander, one each for sea, land and air force, which were considered to be ‘co-equal and interdependent’. Under this system, not only did the theatre air commander command all air forces assigned to the theatre but he also was

⁵³⁰ Futrell, Vol. I, 384-396, especially 394-395.

⁵³¹ DAF, AFM 1-3, *Theater Air Operations*, 4/1/54 (Library; MCRC), 12.

⁵³² AFM 1-3, 25.

‘responsible for the conduct of all air operations essential to the theater mission’. Along these lines, the manual lastly stipulated that ‘[t]heatre air forces are employed as a single integrated unit, and elements thereof are *not* placed under the command of other theater forces’.⁵³³

Most, if not all, of these principles were applied in various forms in AFM 1-5, particularly with respect to command and control arrangements.⁵³⁴ Before assessing these, however, a number of features specific to amphibious operations were first discussed in the manual, some of which had been outlined in the ‘divergent views’ paper. One central tenet was that the Air Force considered that there was no significant difference between ‘normal theater air operations and air operations conducted in conjunction with amphibious operations...’. Unlike the Naval Service, in which (naval and marine) air operations supported amphibious assaults directly, Air Force operations were specifically undertaken ‘*in conjunction with* amphibious operations’.⁵³⁵ A second point was that the Air Force’s definition of an amphibious operation did not seem to automatically include air operations of any sort as the only forces mentioned in the definition were ‘naval and ground forces embarked in ships or craft’. This, again, flew in the face of the Naval Service’s doctrine and past experience (not to mention also that of the Army). Third, while the usual purposes of amphibious operations were listed in the manual (*i.e.*, ‘[t]o seize and secure’ a ‘beachhead’, ‘air and/or naval bases’, or ‘an area...[to]...deny its use to the enemy’), as were ‘Related Operations’ (such as ‘demonstrations, raids, and withdrawals’), there was only one ‘basic form’ of amphibious operation presented: the ‘invasion’.⁵³⁶ This seemed to be yet another slight against the Naval Service by not acknowledging the latter’s primary form of amphibious endeavour—the ‘seizure’.

As mentioned above, the command and control arrangements that were discussed in AFM 1-3 were similarly applied in AFM 1-5 which, in effect, reinforced the overall independence of air forces in general and the Air Force in particular. As the manual itself stated:

⁵³³ AFM 1-3, 25-26. Emphasis added.

⁵³⁴ DAF, AFM 1-5, *Air Operations in Conjunction with Amphibious Operations*, 4/1/54 (Library; MCRC).

⁵³⁵ AFM 1-5, 1. Emphasis added.

⁵³⁶ AFM 1-5, Chapter 1.

‘The amphibious operation is conducted by utilizing the same command structure as that used for the conduct of any other theater operation; that is, unified control is vested in the theater commander, and centralized control of air, ground, and sea forces is vested in each of the respective component commanders’.⁵³⁷ More specifically, the manual maintained that the ‘theater air commander is responsible for all air actions including naval and marine air participation’,⁵³⁸ which flatly contradicted established Navy/Marine Corps doctrine and practice. This disagreement would plague inter-service relationships during the Vietnam conflict when the issue of control over air forces in amphibious operations returned and was never fully resolved.

Finally, these aforementioned command and control arrangements were to remain in place even when a joint force or an amphibious task force was created. In the case of the former, ‘the principle of unified command...[with] a single commander...and component commanders’ held fast.⁵³⁹ In the latter case, only ground and naval forces were included in the amphibious task force while a separate air forces commander operated co-equally ‘with the amphibious task force commander’.⁵⁴⁰

CONCLUSION

As these joint and non-naval service developments in the early and mid-1950s illustrate, the overall development of amphibious/expeditionary warfare in America was not completely predominated by the US Naval Service, as has generally been accepted (at least until very recently). Indeed, both the Army and the Air Force expanded on their own Second World War *expeditionary* experience that had been consolidated—at least initially—in the late 1940s, not only at the organisational/institutional level of analysis but particularly at the tactical/operational level. It was at the latter level, in fact, that all three major services diverged considerably in their thinking and conceptualisation of this form of warfare, so much so that the Army and Air Force promulgated their own doctrines that were in certain significant respects incompatible with that

⁵³⁷ AFM 1-5, 11.

⁵³⁸ AFM 1-5, 11.

⁵³⁹ This was also stated in AFM 1-3, 26.

⁵⁴⁰ AFM 1-5, 11-12.

of the Navy and Marine Corps. At the same time, however, these doctrines also highlighted the similarities between the former two services and the overall course of British (*expeditionary*) development, a trend that would culminate in the 1960s.

CHAPTER FOUR: UNITED KINGDOM, 1950-1956

OVERVIEW

Following on from the initial period of consolidation between 1945 and 1950, Britain's overall course of amphibious/expeditionary development continued to be characterised by various changes at all three levels of analysis. Whilst particular ones involving the role of the Royal Marines Commandos in amphibious operations seemed to indicate a general alteration in Britain's overall course of development and therefore a closer alignment with the American naval approach towards *amphibious* warfare,⁵⁴¹ other events seemed to demonstrate that it remained largely unchanged.

From a strategic perspective, the United Kingdom's evolving situation continued to provide opportunities for *all* types of 'combined operations'—not just the traditional amphibious assault—which tended to involve all three Services out of necessity. All of them, in fact, were applicable in 'global war' scenarios, the requirements for which again ranged from 'raiding operations' (including amphibious ones) to the large-scale 'invasions' of the Normandy-type, although the increased threat of atomic weapons brought about a concomitant rise in the possible use of amphibious techniques for 'beach organisation' operations, which not only included 'maintenance' and 'withdrawal' types but also an 'emergency re-supply' variation in case British ports and harbours were devastated by atomic attack.

At the same time, and in the face of a mounting nuclear stalemate that appeared to reduce the chances of a third world war, there was an increasing cognizance of 'cold war' (and so-called 'peace-time obligations') requirements which, whilst drawing on traditional amphibious landing techniques, emphasised strategic mobility and flexibility, as well as increasingly rapid, air-transported forces. Possible contingencies ranged from 'internal security' and 'imperial policing' to 'limited war' operations which, whilst still far smaller than WWII endeavours, were nevertheless large enough to require the 'combined' (*i.e.*, 'joint') efforts of the three Services.

⁵⁴¹ See Speller, *Role*, Chapter 3, especially 97-98, 100; and 'Role', 101-103, 110. See also Speller, 'Amphibious operations 1945-1998', especially 214, 238.

Whatever the case, it should be remembered that the defence establishment was continuously being limited by severe financial restrictions due to a weak economy, which drove successive governments to institute repeated defence reviews to economise whenever and wherever possible.

Indeed, one of the targets of exactly such economising was the Combined Operations establishment, which had been renamed Amphibious Warfare Headquarters (AWHQ). Although this entity underwent a substantial downsizing in the mid-1950s, as well as a partial re-organisation, which involved the move of the Amphibious Warfare Centre (AWC) to Poole under the administration of the Royal Marines within a new Joint Services Amphibious Warfare Centre (JSAWC), AWHQ continued to exist as an independent, inter-Service agency responsible directly to the Chiefs of Staff (and financed separately by the Ministry of Defence). As before, it also retained overall responsibility for the development of amphibious warfare policy, concept and doctrine development throughout the 1950s, as authorised by the Chief of Combined Operations Staff's (later Chief of Amphibious Warfare's) directive, which remained largely unaltered during this period.

Finally, at the tactical level, although the Royal Marine Commandos had been earmarked throughout the 1950s for all *seaborne* raids, they nevertheless found themselves employed mostly in support of 'cold war' enterprises, for which they were ideally suited as essentially strategically mobile light infantry (with special 'commando' skills). However, as a purely light infantry formation, the Commandos had to be supplemented by Army units for various supporting arms—including artillery and armour—which effectively precluded them from being able to participate in any significant amphibious operations on a purely exclusive basis. As a result, the Commandos could not really be considered equal—or even very similar—to their US Marine FMF counterparts, who not only had organic supporting arms but also their own close air support assets integrated into their specially-organised landing force formations.

STRATEGIC ASPECTS

British Defence Strategy in the 1950s

Collective Security and 'Global Strategy'

Although Britain's geo-strategic situation in the early and mid-1950s was closely tied to the North Atlantic alliance, its defence policy, when combined with extensive imperial commitments, remained globally oriented. This was first summarised in a report produced by the Chiefs of Staff in June, 1950, entitled 'Defence Policy and Global Strategy', which outlined the two central aspects of Great Britain's geo-strategic position: first, that the country depended on a collective North Atlantic security arrangement to survive a 'hot' global nuclear war; and second, that an ongoing and continuous 'cold war' would be global in scope.⁵⁴²

Almost exactly two years later, a revised and refined 'global strategy' paper was produced, which took into account the increasing impact (and costs) of atomic weapons as well as the impact of increased defence spending on the country's struggling economy. Published in June, 1952, the famous and similarly-titled 'global strategy' paper outlined the three main foci of British defence policy that would dominate the 1950s: nuclear war and deterrence; NATO; and 'cold war obligations'.⁵⁴³ The development of amphibious/expeditionary warfare in Britain was connected to all three.

'Global', NATO and 'Cold War' Operations

The outbreak of a 'hot' (or 'global') war, the document postulated, would likely 'open with an exceedingly intense but short phase of a few weeks' duration', one that would almost certainly involve the employment of atomic weapons by both sides. This 'opening phase' would 'probably [be] followed by an intermittent struggle gradually spreading worldwide'.⁵⁴⁴ Termed

⁵⁴² See 'Defence Policy and Global Strategy, 1950' in Ovendale, 73-79.

⁵⁴³ Richard N. Rosecrance, *Defence of the Realm: British Strategy in the Nuclear Epoch* (New York, NY: Columbia University Press, 1968), 129-130.

⁵⁴⁴ See 'Defence Policy and Global Strategy Paper' in Ovendale, 98-102.

‘broken-backed’ warfare, this was accepted by NATO as a central strategic concept for planning purposes for most of the 1950s.⁵⁴⁵

The significance of this second phase of a global war, specifically from an amphibious warfare point of view, stemmed from the assumption that the Soviets—with their superior conventional ground and air strength—would initially overrun most, if not all, of Western Europe (as had been done by Nazi Germany at the start of World War II), not to mention also parts of the Middle East and East Asia. As a result, large-scale ‘combined operations’ would again be required, ranging from ‘raiding’ to ‘invasions’.

The perceived vulnerability of large-scale amphibious operations to atomic weapons, which was magnified by the introduction of hydrogen bombs,⁵⁴⁶ however, was part of the reason for Britain’s support of NATO as the second main focus of its ‘global strategy’. With regard to Western Europe, which would obviously bear the brunt of the Soviet conventional (and atomic) attack, if ‘US and British forces were to be pushed off the continent in the opening stages of a ground war, they might never get back again. All the more reason for a strategy which prevented a successful Russian thrust in the first place’.⁵⁴⁷ This strategy centred on the ‘creation of an integrated force for the defence of Western Europe’, which began with the activation of Supreme Headquarters Allied Powers Europe (SHAPE) in April 1951, and included an American force commitment of ‘six divisional-equivalents and seven [aircraft] wings’.⁵⁴⁸ Such a ‘continental commitment’ provided various opportunities for *amphibious* techniques to be applied towards broader *expeditionary*-type operations, such as ‘withdrawals’, ‘maintenance’ and so-called ‘re-supply’ operations, which received increasing attention in the 1950s when the probability of their use reached a zenith.

⁵⁴⁵ Heuser, Beatrice, *NATO, Britain, France and the FRG: Nuclear Strategies and Forces for Europe, 1949-2000* (London/Basingstoke: MacMillan Press Ltd., 1997), 9-10.

⁵⁴⁶ Bartlett, C. J., *The Long Retreat: A Short History of British Defence Policy, 1945-1970* (London/Basingstoke: The MacMillan Press, 1972), 58, 84-85.

⁵⁴⁷ Rosecrance, 128.

⁵⁴⁸ Duffield, John S., *Power Rules: The Evolution of NATO’s Conventional Force Posture* (Stanford, CA: Stanford University Press, 1995), 49, 52-53.

The final area of concern in the British global strategy fell under ‘cold war obligations’. These were unique in that they differed considerably from the closest American strategic conception—‘limited war’—which still had the possibility of escalating into global (nuclear) war.

But cold war obligations were of [a] different nature. They conduced to political stability in a given region; they bolstered trade and the sterling area; they assured access to vital raw materials, needed in peacetime. Singapore, Malaya, Kenya, and the Middle East were not simply instrumental to a hot-war objective; they were desiderata in themselves.⁵⁴⁹

As such, when certain countries experienced threats from internal (or external) sources, such as communist insurgent forces in Malaya (from 1948 to 1957), Mau Mau ‘terrorists’ in Kenya (from 1952 to 1958), and nationalists in British-administered Cyprus after 1955,⁵⁵⁰ the British reacted by deploying military forces in essentially reinforcement-type actions that were more accurately labelled ‘internal security’ or ‘imperial policing’ operations instead of being classified under ‘limited war’ scenarios. Again,

cold war conflicts were a British specialty. Limited [war] referred to concrete abstention from modes of warfare which, while efficacious locally, might provoke escalation and strategic retaliation. Korea was in this sense an example of limited war. Most of the British involvements overseas, however, were not limited war, but cold war commitments. In Malaya, Kenya, and Cyprus there were no temptations to geographic escalation or the use of nuclear weapons. The forces actually used, classical though they were, were those most appropriate for the conflict at hand.⁵⁵¹

These types of campaigns, amongst others that would emerge later, were not specific showcases for British *amphibious* development. However, they did represent a requirement that emphasised overall strategic mobility and flexibility over specific amphibious or airborne (*i.e.*, tactical/operational) characteristics. Furthermore, from a purely ‘amphibious’ point of view, it did not help that the RN did not have any dedicated amphibious forces (like the USMC’s FMF) available for most of the 1950s, which caused significant shortcomings in trying to plan for crises, such as Abadan (1951) and Egypt (1952).⁵⁵² Some of these amphibious limitations would resurface during the Suez Crisis of 1956 but this was due to the fact that Great Britain generally

⁵⁴⁹ Rosecrance, 175.

⁵⁵⁰ Bartlett, *Retreat*, 87-91.

⁵⁵¹ Rosecrance, 204-5. Emphasis added.

⁵⁵² See, for example, Speller, *Role*, 119-128.

and the Royal Navy in particular had to allocate limited defence funds towards increasingly expensive, but ultimately more important, strategic priorities.

War Plans

Although British strategy for the 1950s appeared to be fully integrated with allied (NATO) strategy, war plans for the early 1950s were still primarily being devised in conjunction only with the United States. As discussed in the last chapter, this process first began in 1949, when the Americans drew up the first Emergency War Plan: OFFTACKLE. The plan's primary strategic objective, which responded to the new political (and therefore military) commitment to defend Western Europe, centred on the 'defense or more probably the reinvasion and liberation of the Continent'. Although subsequent war plans focused more on a plausible defence of the 'Rhine River-Italian Alps line in Europe',⁵⁵³ there remained a varying array of amphibious operations required to defeat a future Soviet offensive in Europe. Indeed, these endeavours ranged from 'raiding' operations, which would have been employed against an occupied European coastline, to large-scale Normandy-type 'invasions', however unlikely given Soviet nuclear capabilities. Other types of 'combined operations' (*i.e.*, involving two or more Services) included those that involved the 'maintenance', 'withdrawal' or 're-supply' of forces (or even civilian populations, in the case of the latter) over beaches, particularly when ports were either damaged or destroyed. As will be seen below, all of these operations were at least studied, if not also trained for, by the British during the 1950-56 time period.

ORGANISATIONAL/INSTITUTIONAL ASPECTS

The 'Radical Review' and COHQ/AWHQ

As a result of the new 'Global Strategy' being implemented in the early 1950s, a 'Radical Review' process to examine corresponding defence expenditures throughout the defence establishment was also instituted. Part of this included a review of the amphibious

⁵⁵³ Maloney, Sean M., *Securing Command of the Sea: NATO Naval Planning, 1948-1954* (Annapolis, MD: NIP, 1995), 89.

warfare organisation, which was first initiated by the Chiefs of Staff (COS) in January, 1953.⁵⁵⁴ A preliminary report was prepared by Lieutenant-General Sir Nevil Brownjohn, the Vice Chief of the Imperial General Staff (VCIGS), who summarised the conclusions of three previous investigative committees and consolidated them into three main ‘principles’: first, that ‘preparation for Amphibious Warfare must be regarded as a *permanent* commitment’; second, that ‘responsibility for Amphibious Warfare policy, development and training, must be truly *inter-Service*’ although ‘the implementation of policy cannot satisfactorily be carried out by an inter-Service committee’ which, in turn, meant that the ‘retention of the Amphibious Warfare Headquarters is essential’; and, third, that ‘CAW should be responsible directly to the Chiefs of Staff and not to any single Service Ministry’.⁵⁵⁵ In short, the Amphibious Warfare organisation had to be *permanent, joint (i.e., inter-Service), and independent*.

Brownjohn’s paper was considered at a Chiefs of Staff meeting on 10 February 1953.⁵⁵⁶ The Chief of Amphibious Warfare (CAW), Major General V. D. Thomas, RM, opened the meeting by bluntly stating that the ‘question to be faced up to was whether to retain the [AWHQ] organisation or to abolish it altogether – there was no half way house’. He then presented what seemed to amount to the strongest case for the retention of AWHQ, arguing that the

atomic threat had recently been studied from the amphibious warfare point of view, and it had become evident that all landing ships and craft available would be required both to support the Army and also to supply the country over beaches if ports were knocked out. We should require greater flexibility in this respect than ever before. The atomic threat, in fact, necessitated that we should develop our amphibious technique as much as possible now. The effect of the abolition of the organisation at this stage would be as disastrous as the abolition of the ITSD in 1939.⁵⁵⁷

This view was hardly unanimous, however. The First Sea Lord (Sir Rhoderick McGrigor), for example, proposed instead that the Amphibious Warfare organisation be turned over to the Royal Marines, who ‘already had considerable amphibious warfare responsibilities in peace’. As he argued, it ‘would be much more economical to make amphibious warfare the responsibility of

⁵⁵⁴ COS (53) 69, 5.2.53 (DEFE 2/1845, folio 7; NA), 1.

⁵⁵⁵ COS (53) 69, 1-2. Emphasis added.

⁵⁵⁶ ___, ‘Confidential Annex to COS (53) 21st Meeting Held on Tuesday, 10th February, 1953’, 10.2.53 (DEFE 2/1845, folio 10; NA).

⁵⁵⁷ ___, ‘Confidential Annex’, 1.

one Service in peace, instead of keeping in being a separate headquarters'.⁵⁵⁸ This view was subsequently reiterated in a separate Admiralty report, which argued that an amalgamation of AWHQ within the Royal Marine Office (RMO) was possible and would save £160,000 annually.⁵⁵⁹

The Admiralty paper, as well as the revised report by Sir Brownjohn, were considered at a COS meeting on 28 July where the First Sea Lord presented the Admiralty's case.⁵⁶⁰ The Chief of the Imperial General Staff (CIGS), Sir John Harding, and CAW both opposed the Admiralty's proposition, not only by reiterating the need to maintain the organisation's inter-Service character but also for reasons of financial independence and overall efficiency. After inconclusive debate, in the name of defence economies, the Committee called for the establishment of a 'full-time Working Party...to carry out a comprehensive examination of the present Amphibious Warfare Organisation, and of the Royal Marine establishments which had Amphibious Warfare aspects'.⁵⁶¹ This Party was to be chaired by Harold Parker, an MOD civil servant.

The 'Parker Committee'

Within days, the Terms of Reference for this Working Party had been drafted,⁵⁶² reviewed⁵⁶³ and approved.⁵⁶⁴ These generally coincided with the 'principles' outlined in the Brownjohn papers. The first of these—*permanence*—was implied in the opening paragraph, which stated that the 'object' of the Working Party was 'to produce an Amphibious Warfare Organisation which can function effectively on a long-term basis at minimum cost'. The other 'principles' were listed as follows:

- (a) The appointment of the Chief of Amphibious Warfare must be an inter-Service one, responsible direct to the Chiefs of Staff Committee.
- (b) The current directive for the Chief of Amphibious Warfare must remain fundamentally unaltered....

⁵⁵⁸ —, 'Confidential Annex', 1.

⁵⁵⁹ COS (53) 357, 22.7.53 (DEFE 2/1846, paper 2; DEFE 5/47). See also ADM 1/24835.

⁵⁶⁰ —, 'Extract from COS (53) 93rd Meeting', [28.5.53] (DEFE 2/1845, Docket AW(O) 7/52/53, folio 25; NA).

⁵⁶¹ —, 'Extract from COS (53) 93rd Meeting', 2-3.

⁵⁶² Secretary, COS, ltr to VCNS, VCIGS, and VCAS, 29.7.53 (DEFE 2/2060, folio 5; NA).

⁵⁶³ —, 'Extract of Minutes of VCOS 94th Meeting on July 30th', n.d. (DEFE 2/1846, paper 3; NA).

⁵⁶⁴ COS (53) 374, 1.8.53 (DEFE 2/1846, paper 4; NA).

- (c) The Organisation must be kept on an inter-Service basis and therefore in principle not subject to the variations of the financial policy of an individual Service Ministry.⁵⁶⁵

The first meeting of the 'Parker Committee' was held at the Ministry of Defence in September, 1953. Over the course of the next month, at least eleven more meetings were held and a final version of the Committee's report was released.⁵⁶⁶ Whilst the Committee did not recommend any changes to the AWHQ itself, it did propose that the School of Amphibious Warfare (SAW) and the Amphibious Warfare Signal School (AWSS) be combined and moved to Old Sarum, 'there to be integrated with the School of Land-Air Warfare [SLAW] as a further (Amphibious) Wing of that School...[to] be renamed the School of Land/Air and Amphibious Warfare'.⁵⁶⁷

The Parker Committee made one revealing observation on the 'peacetime rôle' of the Royal Marine Commandos that is worth noting. Specifically, it considered 'the Commando Brigade [as] much more in the nature of a highly mobile and effective "Fire Brigade" than a true amphibious unit'.⁵⁶⁸ This issue had, in fact, been brought up during an early Committee meeting when Chairman Parker revealed that '[p]lanners regarded the Marine Commandos in peace as sort of [an] Imperial Fire Brigade'.⁵⁶⁹ Despite the fact that the Brigade was 'the only amphibious trained formation in the British Commonwealth',⁵⁷⁰ this contention, along with the fact that the Commandos had spent most of the past five years in an 'internal security' role in Malaya, added to the perception that the Commandos were not true amphibious infantry formations but rather light infantry or even special forces.⁵⁷¹ This aspect, along with the fact that the Commando units were not inherently 'combined arms' formations, differentiated them significantly from their US Marine Corps FMF counterparts.

⁵⁶⁵ COS (53) 374, 2.

⁵⁶⁶ See IDAWC Nos. 8-19, 14.9.-12.10.53 (DEFE 2/1846, paper 9); See also COS (53) 527, 29.10.53 (DEFE 2/2060, folio 21; DEFE 5/49; NA).

⁵⁶⁷ COS (53) 527, 4-9, Appendix E (page 20).

⁵⁶⁸ COS (53) 527, 7, 10.

⁵⁶⁹ IDAWC 18, n.d. (DEFE 2/1846, paper 9; NA), 2.

⁵⁷⁰ COS (53) 527, 24 (Appendix J).

⁵⁷¹ See, for example, Hargreaves' dissertation.

When the Parker Committee report was addressed by the Chiefs of Staff on 1 December, 1953, the COS agreed that further investigations were required before the report could be approved in its entirety.⁵⁷² Follow-on studies by the Joint Planning Staff (JPS) and AWHQ ultimately concluded that the estimated savings from the proposed SAW/AWSS/SLAW amalgamation and move were less than originally anticipated.⁵⁷³ As a result, the COS rejected that proposal at their meeting of 12 April, 1954, but generally approved the rest of the report, which left the Amphibious Warfare Organisation—not to mention CAW’s directive—almost completely intact.⁵⁷⁴

The ‘Davis Committee’

As part of its ‘follow-on’ study on the proposed SAW/AWSS/SLAW amalgamation, the JPS report also provided a summary assessment of amphibious operational requirements, which suggested that a general retrenchment of capabilities be implemented to cut costs.

The technique of large-scale assault operations should be kept alive by study at staff level only, and by collaboration with the US forces where appropriate. We should continue training in small-scale assault and raiding operations. *For reasons of economy*, training and trials should be confined to the Commando Brigade, the Amphibious Squadron and the Beach Brigade. This should not exclude minor amphibious exercises by army units up to battalion strength.⁵⁷⁵

This new evaluation provided the background for the terms of reference of yet another working party which was approved by the Chiefs of Staff in June, 1954, with the Vice Chief of the Naval Staff (VCNS), Vice Admiral W. W. Davis, as Chairman.⁵⁷⁶ Less than one month later, the so-called ‘Davis Committee’ released its report, which generally confirmed the aforementioned retrenchment as presented by the JPS assessment. As a result, whilst the Committee maintained that the ‘inter-service nature of the Organisation must be maintained’, it also agreed that the

⁵⁷² See various correspondence (DEFE 2/2061, Docket No. AW(O) 17/1/53/54, folios 2, 4, 5, 14, 26, 40, 46; DEFE 2/2062, Docket No. AW(O) 17/54, folios 44, 47; NA).

⁵⁷³ COS (54) 110, 6.4.54 (DEFE 2/2061, Docket No. AW(O) 17/1/53/54, folio 69; DEFE 2/2062, Docket No. AW(O) 17/54, folio 51; DEFE 5/52; NA).

⁵⁷⁴ —, ‘Extract of COS(54)44th Meeting on 12/4/54’, n.d. (DEFE 2/2062: Docket No. AW(O) 017/54, folio 54; NA).

⁵⁷⁵ COS (54) 79, 12.3.54 (DEFE 5/51; NA). Emphasis added.

⁵⁷⁶ Speller, ‘Role’, 100.

AWC at Fremington should be closed down, noting that '[a]lthough the Organisation would remain inter-service in nature, the Royal Marines would play the predominate part'.⁵⁷⁷

The Davis Committee report was addressed by the Chiefs of Staff at their meeting on 14 July. In first acknowledging the retrenchment of amphibious warfare operational requirements, the COS Committee seemed open to the proposed move of the Amphibious Warfare Centre from Fremington to Poole and the corresponding amalgamation of SAW with ASRM.⁵⁷⁸ The 'Controlling Authority for Amphibious Warfare' was discussed next. Whilst the possibility of establishing 'an Inter-Service Committee to formulate policy as directed...by the Chiefs of Staff' was considered, it was ultimately rejected in favour of an agreement 'that the Chief of Amphibious Warfare should be in London', albeit with a reduction in 'the present size of Amphibious Warfare Headquarters'.⁵⁷⁹ It was also agreed that CAW should 'examine the exact form of controlling authority for Amphibious Warfare and submit' recommendations back to the Chiefs of Staff.⁵⁸⁰

CAW's assessments were completed and subsequently presented as a single report to the Chiefs of Staff at the end of October. Although CAW first stated that the 'move of the Amphibious Warfare Centre to POOLE is an eminently practical proposition', he had to concede that 'complete integration [was] not, however, possible' between the SAW and the Amphibious School, Royal Marines (ASRM). This was because the 'latter is a single-service School dealing almost exclusively with the practical training of Royal Marines...for specific aspects of amphibious raiding and clearance diving'. The SAW, on the other hand, instructed officers from all three Services on much broader aspects of amphibious warfare, including 'Raiding' (up to the strength of a 'Commando or Infantry Battalion with supporting arms'), 'Beach Maintenance' (both through 'damaged ports and over beaches' in atomic and non-atomic conditions), and 'Assault Landings' (for forces up to a 'battalion or Commando with supporting arms' in cold war

⁵⁷⁷ COS (54) 228, 9.7.54 (DEFE 5/53; NA).

⁵⁷⁸ ___, 'Minutes of Meeting...14th July, 1954 at 11:00 am', n.d. (DEFE 4/71; NA), 8.

⁵⁷⁹ 'Minutes...14th July', 9.

⁵⁸⁰ 'Minutes...14th July', 9-10.

and for forces up to a 'Brigade Group' in cold and hot war).⁵⁸¹ In short, there were wide discrepancies in each entity's role and mission, which could be neither compromised nor reconciled.

In discussing the final form of the 'controlling authority', CAW specifically argued against a single-service system (like the one that existed in the US). To wit,

there are a number of disadvantages in identifying the Chief of Amphibious Warfare too closely with a particular Service establishment. I consider that "Joint Amphibious School" is a misleading term for the establishment at POOLE. The Amphibious Schools from Fremington can be correctly designated "Joint", in view of their inter-service nature. ASRM is not intended to be "Joint". It is a single Service School which, moreover, is very different in scope of instruction from the Fremington Schools in that its function is to train Royal Marines personnel to operate landing craft and raiding craft.... Moreover, the Chiefs of Staff noted that it is important from the point of view of the higher direction of amphibious warfare and the formulation of policy that CAW should be in London.⁵⁸²

Ultimately, this meant that AWHQ should remain intact, as should the CAW's directive.⁵⁸³

At its meeting on 25 November, the COS Committee endorsed CAW's proposals. In agreeing with the 'Controlling Authority' proposals, the COS also approved a revised directive for CAW.⁵⁸⁴ This remained almost completely unchanged from the last version (issued in 1950),⁵⁸⁵ which preserved the status of AWHQ (*i.e.*, CAW) as having the primary responsibility with regard to 'the higher direction of amphibious warfare and the formulation of policy'.

TACTICAL/OPERATIONAL ASPECTS

By 1950, British amphibious/expeditionary development, having been 'profoundly influenced by recent wartime experience', particularly the '[l]arge-scale amphibious operations on the Normandy model', had also diversified to include 'raiding' and so-called 'beach maintenance'-type operations, a situation that would continue well into the 1950s.⁵⁸⁶ As outlined by the Chief of Combined Operations Staff's (COCOS's) revised directive of April 1950,⁵⁸⁷ Combined Operations Headquarters (COHQ) was responsible for a far wider range of

⁵⁸¹ COS (54) 339, 28.10.54 (DEFE 5/55; NA), 1-2, 5-6.

⁵⁸² COS (54) 339, 19.

⁵⁸³ COS (54) 339, 21, Appendix D.

⁵⁸⁴ ___, 'Minutes...25th November, 1954, at 2.30 pm', n.d. (DEFE 4/74; NA), 2-3. See also COS (54) 365, 26.11.54 (DEFE 2/710; NA).

⁵⁸⁵ See COS 422/12/4/50, [12.4.50] (DEFE 2/710; NA).

⁵⁸⁶ Speller, Role, 45-46; 'Role', ??-??.

⁵⁸⁷ ___, 'Directive to the Chief of Combined Operations Staff', [12.4.50] (DEFE 2/1442, Docket No. CO(O) 7/50(A), folio 18; NA).

amphibious warfare operations than just the amphibious assault, which was the primary—if not exclusive—focus of the US Naval Service. At one end of the British spectrum were ‘Raiding Operations’, which had been specifically distinguished from ‘Combined Operations’ mainly because of the initial importance they would have in any future global war (just like in the first years of World War II). Whilst the Royal Marines were allotted the exclusive role of providing all seaborne raiding forces in war, which included both Commandos as well as Special Boat Sections (SBS), COHQ nevertheless retained the overall responsibility for studying ‘the joint Service problems of raiding operations’ from the sea, as well as ‘the integration of sea, land and air forces for such operations’.⁵⁸⁸

At the other end of the spectrum were ‘Combined Operations’, which were broadly defined as ‘a landing or embarkation involving the integration of sea and land forces with, or without, associated air operations’. Whilst these included such areas as ‘defence against an assault landing’ and ‘major river crossings’, amongst the more significant to emerge during the 1950-56 period were *expeditionary*-type operations that involved the so-called ‘beach organisation’, including ‘the maintenance or withdrawal of a considerable force across beaches’ as well as ‘embarking and disembarking cargoes by improvised means’. Finally, ‘Combined Operations’ also still encompassed straightforward offensive-type operations of wide-ranging scope. Whilst COCOS was directed ‘[t]o study the technique of operations larger than a brigade group in conjunction with the Americans’, he was also ‘[t]o preserve and develop the technique of landing and maintaining a force of up to a brigade group across beaches against light opposition’.⁵⁸⁹ These latter endeavours only gradually received attention in the early and mid-1950s as requirements for so-called ‘cold war obligations’ or ‘conflicts’ expanded into the realm of ‘limited war’. Indeed, shortcomings in British capabilities for executing both types of

⁵⁸⁸ ‘Directive’, 2.

⁵⁸⁹ ‘Directive’, 1.

endeavours were displayed to varying degrees during the Abadan crisis of 1951, the crisis with Egypt in 1952, and the Suez Crisis of 1956.⁵⁹⁰

Operational Requirements for ‘Hot/Global War’

As mentioned above, the organisation (and content) of COCOS’s 1950 directive revealed the growing importance that raiding operations played in British amphibious warfare development. This stemmed from the fact that, should the Soviet Union invade and occupy continental Europe (which they were expected to do if war broke out), the United Kingdom would find herself in a similar situation to that of 1940 when the country first raised special ‘commandos’ to conduct raiding operations against a hostile coast. Far less evident, however, were the exact priorities of *other* types of amphibious warfare operations that were not only deemed possible upon the outbreak of war but also increasingly necessary during peacetime. Complicating this matter even further was the limited number of amphibious ships and craft readily available for training and operations (due to financial limitations and resulting manpower shortages)⁵⁹¹ against which all of the aforementioned priorities had to be balanced.

This latter issue was raised as COCOS’s new directive was being finalised in the spring of 1950, when the Chiefs of Staff requested that COCOS ‘submit a paper on the Naval lift which should be maintained in peacetime’.⁵⁹² A ‘framework’ document was drafted by COHQ in April that had the ‘Amphibious Assault’ ranked first amongst eight priorities.⁵⁹³ However, due to Admiralty opposition to the amphibious shipping that this ranking would have required, this category of amphibious enterprise was ultimately ranked last in a revised document, which was submitted on 3 March 1951⁵⁹⁴ and subsequently endorsed (with a few amendments) in a Chiefs

⁵⁹⁰ See, for example, Speller, *Role*, 119-128, Chapter 7; and ‘Role’, Chapter Five. See also Grove, *Vanguard*, 153, 160-163, Chapter Five.

⁵⁹¹ Grove, *Vanguard*, 177-184. See also Speller, *Role*, Chapter 4.

⁵⁹² ___, ‘Extract from COS (50) 47th Mtg of 22 March 1950’, n.d. (DEFE 2/1442, Docket No. CO(O) 7/50(A), folio 14; NA).

⁵⁹³ COS (50) 295, [3.8.50] (DEFE 5/23; NA).

⁵⁹⁴ COS (51) 117, 5.3.51 (DEFE 11/7, folio 716; DEFE 5/28; NA).

of Staff meeting on the 16th.⁵⁹⁵ The final revised list of ‘purposes’ (or ‘requirements’), according to priority, was thus:

- (a) Raiding operations in WESTERN EUROPE and the MEDITERRANEAN.
- (b) Peacetime training; elementary training in war....
- (c) Strategic mobility of the Army including a heavy lift for the build up of forces overseas on mobilisation....
- (d) Royal Naval RHINE Flotilla....
- (e) Maintenance of a Force over beaches, when port facilities are not available....
- (f) Withdrawal of a force overseas....
- (g) Emergency discharge of cargoes in the UNITED KINGDOM owing to damage to ports....
- (h) Small scale amphibious assault operations...which may include:-
 - (i) Seizure of small strategic objectives in the face of light opposition.
 - (ii) Operations on the seaward flank of the Army.
 - (iii) Such operations in support of United Nations policy before the outbreak of general war.⁵⁹⁶

The report also included an analysis to determine which requirements could be met simultaneously, what numbers and types of ships and craft were required, and what deficiencies existed. As the Committee duly noted, requirements (a), (b), (c), (d), and (h) could be met simultaneously while (e) and (f) could be undertaken as alternatives. At the same time, it was also recognised that ‘irrespective of assault operations every existing ship or craft capable of discharging a load over beaches may be required for the Emergency Discharge of cargoes in the UNITED KINGDOM’ (*i.e.*, option (g)).⁵⁹⁷

Undermining all of these conclusions (and as the report itself was forced to acknowledge), however, was the continued lack of resolution with regard to maintaining the amphibious lift for a Brigade Group (assault loaded), which had plagued COHQ/AWHQ for years. Although the report had used this War Office benchmark as a basis for its calculations, it was forced to recognise the Admiralty’s continuing inability to man the required number of ships and craft either ‘in commission in peacetime’ or ‘in Category A reserve’ (*i.e.*, less than three months notice from mobilisation) due to manpower shortages for amphibious lift.⁵⁹⁸

⁵⁹⁵ —, ‘Extract from COS (51) 49th Meeting held on 16 March 1950’, n.d. (DEFE 11/7, folio 719; NA).

⁵⁹⁶ COS (51) 146, 19.3.51 (DEFE 11/7, folio 720; DEFE 5/29; NA), 1, 4. Quoted in Speller, *Role*, 86; ‘Role’, 86.

⁵⁹⁷ COS (51) 146, 2, 5.

⁵⁹⁸ See COS (50) 374, 22.9.50 (DEFE 2/2067, folio 1; NA), 1.

Raiding and the Royal Marines

Both COCOS's directive as well as the ships and craft requirements report demonstrated that raiding operations were evolving into a (if not *the*) priority for British amphibious warfare development at the start of the 1950s. What was most significant about this trend was twofold. On the one hand, raiding operations generally continued to be approached in a similar manner as 'combined operations'; namely from a broad, inter-Service (or *joint*) perspective. On the other hand, whilst the current doctrine at the time—in the form of AWHB No. 10b, *Amphibious Raids*—was correspondingly applicable to 'military forces' in general for raids up to 'the landing of a complete brigade group', it also designated the Royal Marine Commandos as the main provider of the military forces for such endeavours. These enterprises were further addressed 'under two main headings': 'Medium scale raids', which involved 'military forces up to the strength of a commando or battalion'; and 'Small scale raids', which were 'conducted largely by stealth' by a 'total strength...unlikely to be more than twenty'.⁵⁹⁹

The Inter-Service Committee on Raiding Operations (ISCRO)

Raiding operations had already garnered special attention in the United Kingdom in the late 1940s, as the strategic threat posed by the potential invasion and occupation of the European (or 'Eurasian') continent by the Soviet Union began to emerge in earnest. Studies had been performed by COHQ and an Inter-Service Raiding Committee (ISRC) had been established—with COCOS as Chairman—which last met in 1949. In January, 1950, a paper produced by COHQ, which analysed the present position of the ISRC in light of COCOS's soon-to-be-approved directive, ultimately concluded that a 'permanent committee on similar lines to the Inter-Service Raiding Committee [was] required to enable COCOS to carry out his co-ordinating

⁵⁹⁹ See AWHQ (CAW), AWHB No. 10b, *Amphibious Raids*, 1951 (DEFE 2/1771; NA), 1, 3-4, 15, 31.

functions'.⁶⁰⁰ As a result, after a new set of Terms of Reference had been drawn up in June,⁶⁰¹ a 'reconstituted' Inter-Service Committee on Raiding Operations (ISCRO) first met on 28 July.⁶⁰²

At this meeting, the ISCRO first agreed on its tasks, which included providing 'policy directions', inter-Service 'co-ordination', and resolution of potential 'differences'. It also agreed that planning was to be 'the responsibility of the theatre commanders and not of the raiding authorities'. With regard to the 'primary responsibilities for study, training and development', the ISCRO declared that the Royal Marines were in charge when it came to '[r]aids by sea or in which the main force approaches by sea', although COCOS remained 'the responsible authority for co-ordination of training and not the Committee'.⁶⁰³

The Raiding Committee did not meet again until 1 February 1951,⁶⁰⁴ and then again not until 30 May.⁶⁰⁵ A number of areas were covered in the latter meeting that would be revisited frequently over the course of the next few years. The most pressing issue was that of command and control, which stemmed from the lessons learned from World War II, particularly those involving so-called 'private armies'.⁶⁰⁶ Following the production of a paper on the subject that was presented in late March,⁶⁰⁷ and eventually re-circulated in July after further deliberation,⁶⁰⁸ a new set of Terms of Reference was announced for yet another revision of the 'Raiding Operations' policy paper. It was into the final version of this document, which was released in December, that the 'command and control' paper was eventually incorporated.⁶⁰⁹

⁶⁰⁰ G.3. Policy (COHQ), 'Future of the Inter-Service Raiding Committee', 24.1.50 (DEFE 2/2091, folio 3; NA), 1-2.

⁶⁰¹ COS (50) 205, 17.6.50 (DEFE 2/2091, Docket No. CO(O) 27/50, folio 25; NA).

⁶⁰² [COHQ], 'Minutes of the Third Meeting of the Inter Services Committee on Raiding Operations...28th July, 1950', 28.7.50 (DEFE 2/2091, Docket No. CO(O) 27/50; NA).

⁶⁰³ 'Minutes...28th July', 1-3.

⁶⁰⁴ COCOS, ltr to the Secretary of the Admiralty (D of P), CGRM, U-SS, WO (DMO), U-SS, Air Ministry (D of Ops), 2.2.51 (DEFE 2/2078, Docket No. AW(O) 27/1/51, folio 17; NA).

⁶⁰⁵ Secretary, ISCRO, 'Minutes of the Fifth Meeting [ISCRO]...on Wednesday, 30th May 1951', 31.5.51 (DEFE 2/2078, Docket No. AW(O) 27/1/51, folio 31; NA).

⁶⁰⁶ G.2. RM (COHQ), Brief for CCO, 27.1.51 (DEFE 2/2078, Docket No. AW(O) 27/1/51, folio 15; NA).

⁶⁰⁷ Secretary, ISCRO, ltr to D of P (ADM), CGRM, DMO (WO), D of Ops (Air Ministry), 27.3.51 (DEFE 2/2078, Docket No. AW(O) 27/1/51, folio 20; NA).

⁶⁰⁸ Secretary, ISCRO, ltr to the Secretary, JPS, 2.7.51; and Secretary, ISCRO, ltr to D of P (ADM), CGRM, DMO (WO), D of Ops (Air Ministry), 2.7.51 (DEFE 2/2078, Docket No. AW(O) 27/3/51, folios 18, 19; NA).

⁶⁰⁹ See JP (51) 157 (O) T of R, 13.9.51 and JP (51) 157 (Final), 4.12.51 (DEFE 2/2077, Docket No. AW(O) 27/51, folios 15, 19; NA).

Policy for Raiding Operations and the Royal Marines

The official policy for raiding operations had begun to evolve in the late 1940s. Efforts from that era culminated in June, 1950, when the Chiefs of Staff approved⁶¹⁰ a (re-)revised report on 'Raiding Operations', which covered a number of areas, including 'definition', 'object', and 'methods'.⁶¹¹ It should be noted that this report addressed raiding from an inter-Service point of view and therefore outlined responsibilities for various types of raiding, with (i) 'raids by sea' coming under the purview of COCOS, (ii) 'raids by land' under the War Office and (iii) 'raids by air' under the 'War Office in conjunction with Air Ministry'. For 'raids by land or air in which withdrawal is by sea', (i) and (ii) were to be followed 'in conjunction with the Chief of Combined Operations Staff'. Finally, overall co-ordination responsibility was given to the ISCRO 'whose composition and Terms of Reference should be revised accordingly'.⁶¹² The report also outlined inter-Service force requirements which, from the standpoint of the Royal Marines, included maintaining a Commando Brigade in the Middle East 'in peace' and raising two additional Brigades after the outbreak of war, one each at M + 3 and M + 6 months, respectively. In addition, the 'training establishments and units' such as the School for Combined Operations (SCO), the Commando School and the Amphibious School, Royal Marines (ASRM), 'should be adapted for training raiding personnel in peacetime and for acting as a nucleus for the formation of new raiding units after the outbreak of war'.⁶¹³

Although this report went through many revisions over the course of the next eighteen months or so,⁶¹⁴ it remained substantially unchanged when it was approved in final form on 31 March 1952.⁶¹⁵ Mention should be made, however, of an Admiralty memorandum that was submitted during this deliberative process as it specifically outlined the limited roles of the RM

⁶¹⁰ ___, 'Extract from COS (50) 92nd Mtg dated 19 June 1950' (DEFE 2/2091: Docket No. CO(O) 27/50, folio 26; NA), 2-3.

⁶¹¹ COS (50) 222, 29.6.50 (DEFE 2/2091, Docket No. CO(O) 27/50, folio 32; NA).

⁶¹² COS (50) 222, 1-4, 9-10.

⁶¹³ COS (50) 222, 7, 10-11.

⁶¹⁴ For previous (final) versions, see JP (51) 46 (Final), 29.8.51; and JP (51) 157 (Final), 4.12.51 (DEFE 2/2077, Docket No. AW(O) 27/51, folios 11, 19; NA).

⁶¹⁵ See, ___, 'Extract from Minutes of COS Meeting (145th) on 31.3.52', for approval of COS (52) 29 (O) (Final), 18.3.52 (DEFE 2/2081, Docket No. AW(O) 27/52, folios 33, 31; and DEF 11/7, folio 771; NA).

Commandos at the time, which still resembled those from World War II, and had been in place since 1949. The roles comprised: (a) ‘Raiding operations by units or sub units’; (b) ‘Seizure of ports or other areas of strategic importance’; and (c) ‘Assault tasks calling for special skill in amphibious operations’.⁶¹⁶ As a matter of fact, these exact roles had been outlined in the available doctrinal publication at the time, AWHB No. 10a, *The Organisation, Employment and Training of Commandos*, which had just been promulgated in 1951, except that roles (b) and (c), had been reversed.⁶¹⁷ It is interesting to note that this Handbook, just like its affiliate, AWHB No. 10b, *Amphibious Raids*, already discussed above, made a point about de-emphasising any sort of exclusivity—implied or otherwise—with regard to raiding roles specifically, not to mention amphibious-type enterprises in general.

Although commandos have distinctive roles and characteristics it is neither to be expected nor desirable that they should be employed in these roles exclusively. Furthermore, many borderline tasks such as beach landings or penetration on thinly manned fronts, will occur. Non-specialised troops could do these tasks, but commandos could probably do them better and more economically.⁶¹⁸

It was this last aspect that would have the most significance in times of increasing financial stringency, particularly with regard to defence expenditures.

Operational Requirements for Training...and ‘Cold War’ Operations

Training Requirements and the ‘Amphibious Warfare Training Squadron’

The second priority listed in the March, 1951, ‘combined operations ships and craft’ assessment was for ‘training’.⁶¹⁹ As summarised by COCOS in his first semi-annual report to the Chiefs of Staff in September, 1950, the state of affairs in this regard remained poor to say the least.

[T]he present Royal Navy and Royal Marine manpower figure of 1100 will not allow a sufficient number [of ships and craft] in commission for training purposes. Of the more important vessels, the present training squadron includes 1 LST, 1 LCT and 1 LCH, as

⁶¹⁶ COS (51) 735, 10.12.51 (DEFE 11/7, folio 744; NA).

⁶¹⁷ AWHQ (CAW), AWHB No. 10a, *The Organisation, Employment and Training of Commandos*, [1951] (DEFE 2/1770; NA).

⁶¹⁸ AWHB No. 10a, 1.

⁶¹⁹ COS (51) 146, 1.

against 3 LST, 4 LCT, 1 LCH and an LSH(S) without which the assault technique cannot be efficiently preserved.⁶²⁰

This situation, for instance, ‘made it impossible to meet fully the demands for amphibious training, in particular that of the 29th Infantry Brigade and of the Middle East’.⁶²¹ This was not to say that there was no amphibious training conducted at all, although initially it was on a very small scale. This included, for example, a ‘circus’ (or tour) through the Mediterranean in the autumn of 1950 by HMS *SUVLA* (LST(3)), upon which a jointly-staffed training ‘team’ was embarked, complete with a number of LCAs, a DD tank, an LVT, and a DUKW.⁶²² A number of ports were visited, including Trieste, where a relatively large exercise, AJAX ONE, took place involving the landing of two battalions (*i.e.*, more than 1,500 men and 240 vehicles) of the 24th Infantry Brigade in two LSTs and eight LCAs ‘in darkness’.⁶²³ It also included annual RUNAGROUND exercises, which were held to exhibit the British inter-Service approach towards amphibious/expeditionary operations, mostly to British (and allied) staff officers and students. First performed in 1949, these demonstration exercises were put on in the late spring and revolved around a model inter-Service ‘combined operation’, which included an amphibious assault by an army unit (usually of battalion size), a preceding ‘amphibious reconnaissance’, a brief display of the ‘early stages of the build up’ using both Army and Navy elements of the beach organisation’, and, usually, a difficult ‘cliff assault’ conducted by the RM Commandos, specifically to demonstrate the ‘Commando technique’.⁶²⁴

The theme of not having enough amphibious lift available for training purposes continued to be repeated, by the (renamed) Chief of Amphibious Warfare (CAW). In his second progress report, which was released on 4 May 1951, CAW noted that a planned ‘exercise on a

⁶²⁰ COS (50) 374, 4.

⁶²¹ COS (50) 374, 4.

⁶²² See COCOS, ltr to Secretary of the Admiralty, 19.1.50; and COCOS, ltr to CGRM, 20.1.50 (DEFE 2/1698, Docket No. CO 1482C/50, folios 10, 12; NA).

⁶²³ See various correspondence (DEFE 2/1699; NA).

⁶²⁴ Royal Marines, Portsmouth Group, ‘RUN AGROUND III’, 5.52 (Arch 6/4/1; Archives, RMM). For demonstrations in 1954, 1955, and 1956, respectively, see COS (54) 372, 2.12.54, 7; COS (55) 316, 28.11.55, 11; and COS (56) 404, 13.11.56, 15 (DEFE 2/2067, folios 35, 37, 38; NA).

brigade group scale proposed by MELF had to be abandoned' for this exact reason.⁶²⁵ In addition, CAW cited AWHQ's (formerly COHQ's) recently completed 'combined operations ships and craft' assessment which had concluded that peacetime training exercises had to be conducted 'on a brigade group scale with one infantry battalion and elements of the teeth arms assault loaded' in order to maintain the amphibious warfare technique at all.⁶²⁶ CAW reiterated his view yet again at a COS meeting on 21 May, while also noting that 'air lift was also a serious problem from the training point of view'.⁶²⁷

By the time CAW presented his October 1951 progress report,⁶²⁸ certain events had helped bring the issue to the fore. The first was the so-called 'Abadan crisis' in which an amphibious assault capacity of approximately a brigade group was needed to seize an island oil refinery off the coast of Kuwait in the spring of 1951.⁶²⁹ The second was exercise SILVER STRAND, which was held in June 1951. Considered to be 'the most ambitious amphibious exercise...since 1945', SILVER STRAND served as yet another confirmation 'that the technique of the amphibious assault can only be kept up to date by carrying out exercises on a brigade group scale with at least one battalion and its supporting arms assault loaded'. As a result of these events and to alleviate this longstanding predicament, CAW made two proposals to the Admiralty, one old and one new. The first involved increasing the existing amphibious lift by 1 LST and 2 LCT so that 'one battalion with supporting arms may be assault loaded'. The second was to form an 'Amphibious Warfare Training Squadron under one commander', which 'should raise the morale of the crews and give them a more definite aim'. This formation, 'if so organised, would be in better shape to undertake an operational role and there would be at least the nucleus of an amphibious force "in being"'.⁶³⁰

⁶²⁵ 'MELF' stands for 'Middle East Land Forces'.

⁶²⁶ COS (51) 268, 4.5.51 (DEFE 5/31; NA), 2.

⁶²⁷ ___, 'Extract from COS (51) 83rd Meeting held on 21st May 1951', n.d. (DEFE 11/7, folio 723; NA).

⁶²⁸ COS (51) 601, 22.10.51 (DEFE 2/2067, Folio 6; NA), 4.

⁶²⁹ See, especially, Speller, Ian, 'A Splutter of Musketry? The British Military Response to the Anglo-Iranian Oil Dispute', *CBH*, 17:1 (Spring 2003), 39-66. See also *Role*, 119-125; 'Role',

⁶³⁰ COS (51) 601, 4-5.

‘Cold War’ Requirements and the Amphibious Warfare Squadron (AWS)

At the COS meeting of 21 May—where CAW had again lamented the shortage of amphibious lift—the War Office had also noted that the recent Abadan crisis ‘had clearly emphasised...that a suitable and sufficient lift was not only a training requirement but also one connected with cold war operations’. After some minor discussion on this point (and after having endorsed CAW’s report), the Chiefs directed that the ‘War Office...prepare in consultation with the Admiralty, Air Ministry and the Chief of Amphibious Warfare, an appreciation of the amphibious warfare requirement in 1952 for the prosecution of the cold war’.⁶³¹ At the appeal of the War Office, however, this request was later redirected to the JPS, which finally began its investigation in January, 1952.⁶³²

The JPS released its report on 14 March, 1952.⁶³³ Noting that the previous ‘ships and craft’ assessment had been ‘solely concerned with training and the early stages of a global war’ and that there was ‘as yet no policy for the employment of such forces in the cold war’, the JPS ultimately focused its new report on ‘the requirements for amphibious forces in 1952 for cold war and training tasks’. Confirmed was the necessity ‘to preserve and develop the technique’ for a Brigade Group amphibious assault, which required the retention (in commission or immediate reserve) of an assault lift for a battalion with some supporting arms. This amounted to 1 LSH(S), 1 LCH, 3 LST(3), 4 LCT(8), 1 LCN, and 12 LCA. The report also noted the recent crises in the Middle East—which illustrated the need for amphibious lift for a possible intervention in Egypt—that had ‘demanded ships and craft to lift as much as a Brigade Group assault loaded’. This, in turn, had prompted the question of ‘what formation is the smallest that can operate tactically in an assault and at the same time can be assault-loaded into such ships and craft as are within the capacity of the Admiralty to maintain in commission or immediate [reserve]’; the answer turned out to be ‘a battalion with elements of supporting arms’.⁶³⁴

⁶³¹ —, ‘Extract from COS (51) 83rd Meeting...’, 1-2.

⁶³² —, ‘Extract from COS (51) 88th Meeting held on May 28th 1951’, n.d. (DEFE 11/7, folio 726; NA).

⁶³³ JP (52) 1 (Final), 14.3.52 (DEFE 6/20; NA).

⁶³⁴ JP (52) 1 (Final), 5.

Having thus concluded that the lift requirements for both ‘cold war and training tasks’ were the same (as were their respective deficiencies), the JPS report went on to argue that a lack of preparedness had ‘handicapped us considerably in planning’ possible amphibious operations—up to a Brigade Group in scale—at Abadan in the spring of 1951 and against Egypt in the spring of 1952. Because such contingencies were considered possible in the future, ‘an amphibious squadron to carry a battalion with some supporting arms assault-loaded’ was ultimately deemed necessary, which ‘would alternatively be adequate to land on beaches against no opposition a formation, with few vehicles, approximating to two battalions’. Furthermore, if located in the Mediterranean, such a squadron would be able to reach the ‘Far East’—as well as ‘Home Waters’ (if necessary)—for cold war purposes but also remain available for annual training purposes at home.⁶³⁵

The COS reviewed the JPS report on 31 March.⁶³⁶ Whilst the Chiefs confirmed that the ‘long-term cold war requirement’ was for a battalion group amphibious lift (assault loaded), they also ‘noted that there appeared to be no prospect in the immediate future of meeting this requirement without altering existing naval priorities’. With regard to establishing an ‘Amphibious Squadron’, however, the COS agreed that this formation should be held ‘at the disposal of the Chiefs of Staff to meet cold war requirements’. The Chiefs therefore directed that the Squadron be sent to the Mediterranean ‘for a period’ after completing a previously-planned NATO exercise near home waters and that the Admiralty investigate the ‘administrative implications of this move in light of’ the Squadron’s cold war role. Its location would then be reviewed ‘periodically’.⁶³⁷

Despite this agreement and the fact that the Admiralty had officially agreed to establish an ‘Amphibious Warfare Squadron’ (AWS) by April, 1952, CAW continued to report that said squadron was still short 1 LST and 2 LCT. Not only did this mean ‘that training cannot be undertaken on a realistic basis’, but also that ‘amphibious warfare training cannot be effective for

⁶³⁵ JP (52) 1 (Final), 5-6.

⁶³⁶ —, ‘Extract from COS (52) 45th Meeting held on 31st March 1952’, n.d. (DEFE 11/7, folio 773; NA).

⁶³⁷ —, ‘Extract from COS (52) 45th Meeting held on 31st March 1952’, n.d. (DEFE 11/7, folio 773; NA), 3-4.

1953'.⁶³⁸ Six more months brought a bit of improvement to the situation, even if it was mainly forced by the ongoing crisis with Egypt. In the early autumn, the AWS had moved into the Mediterranean to augment existing amphibious lift. Although no operations were undertaken, some training in the landing Centurions from LSTs and LCTs did take place, which seemed to provide evidence 'that proficiency for cold war operations can only be acquired if an amphibious force is available in the theatre thus making *Joint Training* practicable'. As a result, CAW recommended that the Squadron remain in the Mediterranean, for three reasons: first, a 'Cold War situation or civil disturbance' might occur again; second, 'troops including 3 Commando Brigade are available for training in that Theatre'; and third, the Squadron could be directed to the Far East if necessary (not to mention also the UK if required for any reason).⁶³⁹

Even with these apparently positive developments, however, the overall training situation still appeared to be quite dire, particularly on the home front. Not only did CAW concede that the only 'main feature of training in the UK was a maintenance exercise of the 264 Beach Brigade', but he also noted that a planned 'Brigade Group Scale Amphibious Exercise in 1952...had to be cancelled'.⁶⁴⁰ Ultimately, this forced him to re-issue a warning should amphibious warfare training goals not be met.

I must again emphasise the importance of carrying out an exercise on a Brigade Group scale with one Battalion assault loaded....Unless we can mount an Exercise of this type the maintenance of the technique of Amphibious Warfare will be confined solely to instruction in the classroom. As a result our own Commanders and Staff will tend to avoid an amphibious operation owing to lack of planning knowledge and practice. Furthermore no formations, units or individuals will get a sufficient practice in amphibious operations to enable them to be carried out efficiently should the need arise in Cold War conditions.⁶⁴¹

Training and Exercises

Despite CAW's warning, amphibious training did increase in 1953, both in scale and participation. By April, CAW was able to report that there had already been 'two exercises in which a Commando and the Amphibious Warfare Squadron have taken part' with more planned,

⁶³⁸ COS (52) 234, 30.4.52 (DEFE 2/2067, Folio 9; NA).

⁶³⁹ COS (52) 649, 29.11.52 (DEFE 2/2067, folio 16; NA), 7. Emphasis added.

⁶⁴⁰ COS (52) 649, 12.

⁶⁴¹ COS (52) 649, 11.

including two exercises with NATO forces and individual training ‘on the North African Coast’. Noting that this was ‘the first time that amphibious training on this scale has been possible since the War’, CAW predicted that ‘there will exist a small, but efficient, amphibious force’ if the training continued, just as had been claimed when arguments were made for the Amphibious Warfare Squadron’s establishment.⁶⁴²

Indeed, amphibious training continued over the next six months, during which time each of the three Commandos in 3 Commando Brigade trained with the AWS.⁶⁴³ Of particular note was Exercise WELDFAST, which included the AWS, 45 RM Commando, and a detachment from No. 116 Company, RASC (Royal Army Service Corps), the only Army unit other than 264 Beach Brigade to operate DUKWs and LVTs.⁶⁴⁴ This was a NATO exercise that involved an assault landing on the coast of Eastern Macedonia by an allied amphibious and landing force, as displayed below:

Exercise WELDFAST		
Countries	Amphibious Force	Landing Force
US	1 LSH(L), 3 APA, 3 AKA, 2 LSD, 2 APD	2 reinforced battalions
UK	1 LSH(S), 1 LST(A), 1 LCT	45 RM Commando, 116 Company (RASC)
Greece	2 LCT	1 commando battalion
Italy		demolition teams

Although all of the forces involved ‘received comprehensive orders based on the US standard amphibious technique’, the employment of 45 RM Commando was very reminiscent of the way in which Commandos had been employed for special (*i.e.*, difficult or ancillary) assaults tasks during World War II instead of being employed as straightforward (naval) assault infantry. To wit, ‘45 Royal Marine Commando was landed by AW Squadron on a separate beach and joined up on the left flank of the US Marine Corps for the advance inland’. Indeed, while it was noted that this exercise ‘proved that British and US Amphibious Forces can work efficiently together in spite of the fact that there may be some differences in technique’, it qualified this a bit by reminding its readers that in ‘deciding the technique used, due consideration must be given to

⁶⁴² COS (53) 169, 2.4.53 (DEFE 2/2067, folio 19; NA), 1-2.
⁶⁴³ COS (53) 538, 30.10.53 (DEFE 5/49; NA); and Chief of Staff ltr to CGRM, 13.11.53 (DEFE 2/2067, folio 25; NA), 8.
⁶⁴⁴ COS (53) 538, 8.

local conditions and the disposition of enemy forces', which seemed to imply that amphibious infantry units were not automatically inter-changeable.⁶⁴⁵

'Beach Organisation' Operations: The 264 (Scottish) Beach Brigade (TA)

Aside from raiding and the emerging operational requirements for training and 'cold war' operations, the most significant priority with regard to British amphibious/expeditionary development during the 1950s involved the 'beach organisation'.⁶⁴⁶ This, in fact, involved three of the priorities listed in the approved ships and craft requirements report of March, 1951, and included (in order of priority): the 'Maintenance of a Force over beaches', the 'Withdrawal of a force overseas...', and the 'Emergency discharge of cargoes in the UNITED KINGDOM owing to damage to ports...',⁶⁴⁷ all of which were to be performed by the 264 Scottish Beach Brigade.

Originally 'a normal Infantry Brigade' of the Army, the '264 (Beach) Brigade TA' was first tasked by the War Office with training 'in the functions of Beach Groups in Combined Operations' in October 1946.⁶⁴⁸ According to COHQ, the main task of these Beach Groups—two or more of which made up a Beach Brigade—during the war had been 'to function as the administrative spearhead in an assault on an enemy coastline'. More specifically,

[t]he tasks of a Beach Brigade on landing may include breaking through underwater and beach obstacles, clearance of local resistance, landing of assault troops and maintain[ing] the assault formation and the build up ashore for an indefinite period, until a Base Port is captured or artificial port is constructed.⁶⁴⁹

According to the Brigade's first training directive of July, 1947, its initial training programme was, up to 1950, 'designed to provide a suitable cadre on which the Brigade can be built up with its militia intake after that time'. This was done to a certain degree as limited exercises were held to train 'the Brigade...in an assault maintenance role', but the formation remained at a 'low mobilisation priority...[as] part of the 2nd Contingent, TA, as a large scale amphibious assault was not foreseen within the first twelve months of a war'.⁶⁵⁰ Indeed, the

⁶⁴⁵ COS (53) 538, 11-12 (Appendix).

⁶⁴⁶ See Speller, *Role*, 88, 113; 'Role', 88.

⁶⁴⁷ COS (51) 146, 1, 4.

⁶⁴⁸ ___, 'Role of 264 Beach Brigade', [1946] (DEFE 2/1634, Docket No. CO 838/49, folio 2; NA), 1.

⁶⁴⁹ CO, 264 SBB, ltr to Distr., ?2.47 (DEFE 2/1634, Docket No. CO 838/48, no folio; NA), 1.

⁶⁵⁰ [AWHQ], 'A Short Review...', Pt. V, 4.

process of building up a 'cadre' was coming along rather slowly as the total strength of the formation by the end of July, 1950, for example, amounted to only 1,018 personnel (of an establishment of 6,316).⁶⁵¹

The 'Maintenance' and 'Withdrawal' of Forces Overseas

Despite the successful completion in mid-1950 of Exercise BUILD UP, which employed 264 Scottish Beach Brigade (SBB) in a scaled-down amphibious assault by an infantry brigade group involving the use of major landing craft and amphibians,⁶⁵² it was not until 1951 that the serious study of beach maintenance seemed to take hold, which—not quite surprisingly considering the continuing Soviet threat of occupying the European continent—initially seemed to focus on 'withdrawal' operations. In January of that year COCOS directed that preparations be made for a 'Withdrawal Exercise', which was essentially a headquarters study. This was to revolve around a 'British field force of two Corps each of two Divisions with associated Tactical air forces' that would have to evacuate the beaches in the face of land, air and, to a lesser extent, naval opposition.⁶⁵³ By September, 1951, this initiative had morphed into a specific proposal from the Commandant of the AWC to 'study the principles of an amphibious withdrawal'.⁶⁵⁴

According to a report finally released in August 1954, which was still based on the AWC study period of March 1952, the amphibious ships and craft that were being maintained for a Brigade Group lift would be able to evacuate 'all the personnel of two corps, each of two Divisions from North West Europe to the United Kingdom in about one week'. In addition, the same lift would need approximately 'six weeks to evacuate all associated AFBs, guns and vehicles without aid from other shipping'. All told, this amounted to approximately '130,000 men and 30,000 vehicles'.⁶⁵⁵ Of particular note was that, instead of employing a joint command system as was custom in British amphibious warfare, an Army officer was to be placed in

⁶⁵¹ HQ 264, Scottish Beach Brigade, 'Strength Returns', 8.8.50 (DEFE 2/1614, folio 8; NA), 1.

⁶⁵² See various correspondence (DEFE 2/1614, Docket 1146/50, folios 8, 17, 27, 29; NA).

⁶⁵³ A/Q, ltr to DCO(P), 12.1.51 (DEFE 2/1806, Docket No. AW 271/5/51, folio 2; NA).

⁶⁵⁴ Cmdt., AWC, ltr to AWHQ, 25.9.51 (ARCH 2/18/23, Docket No. AW 1528/20/51, folio 6; Archives, RMM).

⁶⁵⁵ [AWHQ], 'Organisation and Control of a Withdrawal of Army Forces and Associated Air Forces Over Beaches in Western Europe', 16.8.54 (DEFE 2/2058, Docket 1/12/54, folio 18; NA), 2.

command of the withdrawal, using an ‘Embarkation Headquarters’ (EHQ). This organisation had four main characteristics: it was to be ‘Joint Service’, established ‘as early as possible’, only in charge of the evacuation (not the defence of the bridgehead), and under command of the senior Army officer.⁶⁵⁶

Although the withdrawal study was comprehensive enough, by the time it was officially released (*i.e.*, in mid-1954), its usefulness appeared to be in doubt because war plans were assuming increasingly stronger defences on the ‘Central Front’, which gradually reduced the likelihood of having to implement such a requirement. During the same time period, progress had also been made with regard to the development of the straightforward maintenance of *expeditionary* forces, which again revolved around the Beach Brigade. Indeed, this was illustrated by planned training exercises at Braunton near the AWC in North Devon in the summer of 1952 that involved ‘Beach Group Exercises’ rather than assault training.⁶⁵⁷ The central aim of Exercise FIRST RESERVE, in fact, was to ‘exercise a composite Beach Group of 264 Scottish Beach Brigade in Beach Maintenance technique’ using available coasters, fast launches, an LCT, the LCA Flotilla (manned by RM reservists), and both DUKW and LVT type amphibians. Each ‘camp’ (*e.g.*, FIRST RESERVE I and II) was divided into ‘reconnaissance’ phase, a ‘discharge’ phase and a reloading phase, with the middle phase involving training at night.⁶⁵⁸

(Emergency) ‘Maintenance’ in the United Kingdom

The War Office focused on this task for the Brigade when it represented to the Chiefs of Staff what it saw as the prioritised roles of the Brigade in November 1952:

- (a) The maintenance of a brigade group over beaches.
- (b) The evacuation of a force over beaches.
- (c) The working of a damaged port either on the Continent or in the United Kingdom.
- (d) Assistance to the civil authorities in the United Kingdom in the organisation and initial operation of “beach ports” to supplement the major ports of this country.⁶⁵⁹

⁶⁵⁶ [AWHQ], ‘Organisation’, 3-4, 10.

⁶⁵⁷ HQ, 264 SBB (TA), ltr to AWHQ, 5.12.51 (DEFE 2/1828, folio 3; NA), 1. See also HQ, 264 SBB (TA), ltr to AWHQ, 30.4.52 (DEFE 2/1829, Docket No. CO 831/3/52, folio 19; NA).

⁶⁵⁸ —, ‘Exercise “FIRST RESERVE”’, 7.7.52 (DEFE 2/1829, Docket No. CO 831/3/52, no folio; NA).

⁶⁵⁹ COS (52) 645, 25.11.52 (DEFE 2/1828, folio 18; NA), 1.

AWHQ was quick to comment, however, that the order of the above priorities should be re-organised to (c), (d), (b), and (a).⁶⁶⁰ The most likely reason for the change stemmed from the fact that exercises to test the Brigade's ability to work a 'damaged port' had begun as early as 1951, one of the first being ATA PORT, which was held in October.⁶⁶¹ This administrative type exercise aimed to 'study the employment of 264 Scottish Beach Brigade in the operation and development of a small port and its adjacent beaches on the outbreak of war' using a tactical scenario in which the port of Glasgow had been damaged heavily by atomic bombs, thus necessitating the use of the smaller port of Troon.⁶⁶²

However, serious study of this particular problem did not really emerge until 1953 with 1952 being dominated by the study of the maintenance of expeditionary forces. Having ascertained the main threats to the United Kingdom as being from 'sea mining' and 'atomic and heavy bomber attacks', AWHQ concluded 'that the alternative of loading onto boats, amphibians and lighters without port facilities, is unlikely to achieve the rate of discharge required...'.⁶⁶³ By March 1954, whilst in the process of amending the Beach Brigade's original 1947 training directive, a number of decisions were 'reached on the tasks, command and organisation of 264 (Scottish) Beach Brigade', specifically including the re-prioritised roles, the continued use of infantry as the core of the formation, and the need for new 'operational' and 'training' directives.⁶⁶⁴ While the roles were further refined over the next few months and then disseminated,⁶⁶⁵ headway was also made with regard to the latter aspects, although the training directive was delayed until after Exercise WINCH, held in July 1954.⁶⁶⁶ This was a maintenance exercise conducted by 'the whole of 264 (Scottish) Beach Brigade...to test the means of supply through a small port'. It was held at Zeebrugge and involved not only reserve Royal Marine

⁶⁶⁰ —, 'Amphibious Warfare – Note by the War Office', n.d. (DEFE 2/1828, folio 19; NA), 1.

⁶⁶¹ HQ, 264 SBB (TA), ltr to G Branch, HQ Lowland District, 17.10.50 (DEFE 2/1614, Docket No. CO 786/50, folio 24; NA).

⁶⁶² Cmdr., 264 SBB, ltr to AWHQ, 9.10.51 (DEFE 2/1826, Docket No. CO 831/1/51, folio 6; NA), 1-2.

⁶⁶³ [AWHQ], 'Maintenance of Supplies to Great Britain (Plan "Super Teak")', [2/3.53] (DEFE 2/2063, Docket No. AW (O) 380/52/53, folio 6; NA), i, 1.

⁶⁶⁴ Secretary, COS, ltr to 1SL, CIGS, CAS, 12.9.51 (DEFE 11/10, folio 217; NA), 1-2.

⁶⁶⁵ — (WO), ltr to GOC, Scottish Command, 14.4.54 (DEFE 2/1889, Docket No. AW 28/3/55, folio 12; NA).

⁶⁶⁶ DGMT (WO), memorandum for HQ, Scottish Command, 23.7.54 (DEFE 2/1888, Docket No. AW 28/1/55, folio 16; NA).

landing craft crews but also LCMs from the Rhine Squadron, which unloaded ‘stores destined for BAOR...from one Liberty Ship and four coasters’.⁶⁶⁷

The Brigade’s training directive was finally promulgated in December 1954, and offered a re-prioritised list of roles, as follows:

- (a) Assistance in the working of damaged ports either in the United Kingdom or on the Continent.
- (b) The replacement of damaged ports by beach ports either in the United Kingdom or on the Continent.
- (c) The maintenance of a brigade group in the assault over beaches.
- (d) The evacuation of a force over beaches.⁶⁶⁸

Soon after being disseminated, however, the list of roles came under investigation once again, this time in an AWHQ report on CAW’s responsibilities with regard to ‘Port and Beach Maintenance’. After first reviewing CAW’s directive as it related to this particular field, the report scrutinised the specific roles of the Brigade, first by stating outright that ‘the task at...(c) above is remote’, due to the fact that the original task ‘for which the Brigade was formed – the support of a corps of two divisions – no longer exist[ed]’; and second, by considering that (d), at least with regard to the ‘evacuation of an assault force’, was ‘now improbable’. As a result, the War Office itself was already re-examining the roles of the Brigade and, with the agreement of AWHQ, would ‘likely...propose limiting them to two...(a) and (b)’.⁶⁶⁹

This, in fact, occurred in early 1955 as the Executive Committee of the Army Council reduced the roles of the Brigade to ‘(a) Assistance in the working of damaged ports, small ports, harbours, or ‘hards’, either in the UK or on the Continent; [and] (b) Emergency shipments over beaches either in the UK or on the Continent’.⁶⁷⁰ As a result, the Brigade was ‘no longer responsible for maintenance in the assault’ which,⁶⁷¹ as had been warned in the AWHQ analysis, meant that CAW’s ‘stake in the Brigade must inevitably diminish’.⁶⁷² Indeed, by the time CAW

⁶⁶⁷ COS (54) 372, 2, 7.

⁶⁶⁸ VQMG (WO), ltr to CAW, 10.3.54 (DEFE 2/1888: Docket No. AW 28/1/55, folio 9; NA), 1.

⁶⁶⁹ AA/QMG, ‘Port and Beach Maintenance – Chief of Amphibious Warfare’s Responsibilities’, 20.12.54 (DEFE 2/1888: Docket No. AW 28/1/55, folio 20; NA), 1-2.

⁶⁷⁰ VQMG, memorandum for CAW, 23.2.55 (DEFE 2/1889: Docket No. AW 28/3/55, folio 35; NA), 1.

⁶⁷¹ VQMG, memorandum, 1.

⁶⁷² ‘Port and Beach Maintenance’, 2.

had compiled his annual report in November, 1955, his responsibility with regard to the Brigade had, in fact, 'largely disappeared'.⁶⁷³

From 'Combined Operations' to 'Amphibious Warfare'?

As outlined above, overall British amphibious/expeditionary development during the early and mid-1950s appeared to be dominated by such varying forms of amphibious technique as 'raiding' and 'beach organisation' operations. Traditional amphibious landing operations were not ignored, however, even though they had dropped from first to last priority in the 'operational requirements' assessment process of 1950-1. Progress had been made with the establishment of a permanent 'Amphibious Warfare Squadron' in early 1952 which, when coupled with the redeployment of 3 Commando Brigade to the Mediterranean from the Far East that summer (not to mention also the increased availability of Army battalions and their supporting arms), provided a relatively significant amount of amphibious training, if not also operational potential. Underlying this potential was continued study of larger-scale amphibious operations in conjunction with the Americans, as had been outlined in CAW's directive since 1950. Although there were many general similarities between American and British techniques, the traditional British approach had still evolved in a manner that had some fundamental differences with the American (naval) technique (but, simultaneously, similarities with the US Army and Air Force). A number of these differences were ultimately revealed by Operation MUSKETEER in November 1956, which involved a joint (and combined) seaborne/airborne assault to seize Port Said, Egypt.

Operational Requirements for 'Amphibious Warfare', 1954

Following on from the early assessment process to determine the peacetime requirements for 'combined operations ships and craft', a new operational requirements assessment was requested from the JPS on 1 December 1953, the results of which were finally approved by the COS on 11 March 1954. It was divided into four parts, including 'cold war', 'hot war', 'deployment and maintenance', and 'the need for an Amphibious Warfare Organisation', which

⁶⁷³ COS (55) 316, 3.

not only reflected a fundamental shift in strategic priorities (from ‘hot war’ to ‘cold war’) but also indicated that amphibious assault operations were now back to a high priority.⁶⁷⁴

Concerning the ‘cold war’, the report generally concluded that ‘large-scale assault operations’ were not likely although ‘occasions may arise when small-scale operations would have to be carried out’. As a result, amphibious forces were anticipated for the Middle East only, although at a scale far below that which had been previously required. To wit,

[i]t is not possible to foresee exactly what form any of these operations might take or what size of minor amphibious lift might be required, but against light opposition, which is what we expect, a force of about a battalion group with appropriate lift should be adequate. The Amphibious Warfare Squadron...and the Commando Brigade or Army units which are already in the Mediterranean could meet this requirement.⁶⁷⁵

In the case of the ‘hot war’, the report did not deviate much from previous assessments in that, ‘amphibious operations would of necessity be on a very small scale’ (*i.e.*, raiding operations) during the initial stages of any future (global) war. Finally, although the report concluded that enough LSTs existed to fulfil the requirements for ‘deployment and maintenance’ purposes and that the existing Beach Brigade would also suffice for the time being, it also addressed the issue of the need for an ‘Amphibious Warfare Organisation’.⁶⁷⁶ According to the JPS, it was ‘unwise to assume’ that no such requirement would exist and that, consequently, such operations should not be forgotten.

We should keep alive the technique of large-scale assault operations by study at staff level only, and by collaboration with the US forces where appropriate. We should continue training in small-scale assault and raiding operations. *For reasons of economy*, training and trials should be confined to the Commando Brigade, the Amphibious Squadron and the Beach Brigade. This should not exclude minor amphibious exercises by army units up to battalion strength.⁶⁷⁷

‘Amphibious Warfare’ Training, Exercises, and Doctrine Development

Although the above assessment appeared to devolve a primary amphibious role to the Commandos, as even the JPS report noted, it was not to the point of exclusivity. This was demonstrated by the exercises that were undertaken over the course of the next few years, which

⁶⁷⁴ COS (54) 79, 12.3.54 (DEFE 5/51; NA). See also COS (53) 136th Meeting, 3; and JP (54) 8 (O) T of R, n.d. (DEFE 2/2060, folios 34, 35; NA).

⁶⁷⁵ COS (54) 79, 2-5

⁶⁷⁶ COS (54) 79, 3-6.

⁶⁷⁷ COS (54) 79, 5. Emphasis added.

involved both the Commandos and Army battalions, not to mention also Army supporting units. The year 1954, for example, witnessed all three Commandos receiving practical training, as did ‘one infantry battalion, with supporting arms...both by day and by night’. This had occurred despite the fact that ‘the command and military forces to be exercised were situated in the Canal Zone’.⁶⁷⁸ Exercise FLOODTIDE, which was held in August, ‘was the first occasion since 1948 in which an army battalion carried out a full scale amphibious exercise’. In addition to this unit, a number of supporting army elements were also employed, including one troop from the Field Artillery, RA, one troop from the 1st Royal Tank Regiment (RTR), and one ‘ad hoc’ amphibious platoon from the 1st Armoured Divisional Column, RASC. Some of these same supporting units exercised with various Commandos in separate instances, including another troop from the 1st RTR (plus a troop from 33 Airborne Field Battery, RA) in Exercise MEDCONVEX with 45 Commando, and the aforementioned ‘ad hoc’ amphibious platoon in Exercise MEDFLEX BAKER with 42 Commando. Finally, RUNAGROUND V again employed an army battalion—the 1st Battalion, Rifle Brigade—to demonstrate the amphibious assault.⁶⁷⁹

1955 saw a further expansion of joint training, even though ‘two of the major exercises were cancelled at short notice’. 40 and 45 Commandos took part in two significant exercises, the larger of which—BON MARCHE—consisted of an ‘amphibious assault’ with the latter Commando, one troop of the 14/20 Kings Hussars, one troop of the 3rd Regiment, Royal Horse Artillery (RHA), and the 266 Amphibious Observation Battery, RA (AOBRA). The Hussars and RHA troops, in fact, were also slated for Exercise FULL SAIL in support of the 1st Battalion, South Staffords—along with one troop, Royal Engineers (RE), and the Amphibious Platoon, RASC—although this was ultimately cancelled. Also cancelled was its smaller substitute, STORMSAIL, in which 42 Commando was to participate. Finally, the 1st Battalion, Highland

⁶⁷⁸ COS (54) 372, 1-2.

⁶⁷⁹ COS (54) 372, 4-7.

Light Infantry participated in the RUNAGROUND demonstration in May, which included a 'Helicopter Phase', along with 42 Commando, which performed the cliff assault.⁶⁸⁰

Finally, due to Commando commitments in 1956, the only significant amphibious training was allocated to Army units, even though a number of their exercises were ultimately cancelled. The most significant exercise of the year, for example, was carried out by the 1st Battalion, Seaforth Highlanders, in Exercise FORTHRIGHT, which was designed 'to carry out progressive training, covering all aspects of the amphibious assault and re-embarkation...'. Other exercises similar in scale included SHELLDRAKE, which was a night landing (and withdrawal), and MEDTACEX, which involved the 'landing of a [Turkish] military force of battalion strength over two beaches in support of a larger operation (imaginary)'. Two additional exercises were notable even though they were cancelled as they were each more expansive than any previous exercises held to date. The first, BEAU SEJOUR, was to have involved the 'landing of two battalions (one British and one French) and supporting forces by night...[and] re-embarked tactically the following night'. The second of the cancelled exercises was SEASHELL which, as 'the largest British amphibious exercise carried out in the Mediterranean for some time', was to have involved 'the landing of a battalion with supporting arms under cover of naval gunfire and air support'. Rounding out these endeavours was the annual RUNAGROUND demonstration, which again 'included a helicopter phase' during the battalion assault, provided by the newly-formed Joint Experimental Helicopter Unit (JEHU).⁶⁸¹

What all of these exercises suggest, as initially mentioned, was that although the 'operational requirements' assessment had called for a reduction in the scale of training and trials, this did not seem to alter previous policies concerning the inter-Service nature of British amphibious/expeditionary practice. Indeed, both the Royal Marine Commando Brigade as well as various Army battalions continued to be trained in—or earmarked for—amphibious

⁶⁸⁰ COS (55) 316, 4-11.

⁶⁸¹ COS (56) 404, 4-5, 12-15; and AWHQ, *AWHQ Information Letter No. 7, 1956*, 7.1.57 (Library; RMM), 3-9.

operations, particularly the latter after the Commandos were deployed to Cyprus for 'internal security' duties in late 1955.

This state of affairs was reinforced even further by the promulgation of various doctrinal publications by AWHQ, which continued to address amphibious/expeditionary operations specifically from a joint perspective. This included straightforward doctrine, which had been promulgated throughout the 1950s in the form of the so-called Amphibious Warfare Handbooks (AWHBs). For example, and as discussed above, the two books that covered Commandos and raiding operations, Nos. 10a and 10b, respectively, stated explicitly that they were not applicable to any single Service exclusively.⁶⁸² Indeed, a quick glance at the organisational arrangement of COHBs/AWHBs reveals a similar organisational methodology used to classify the World War II era COPs, which involved separating volumes according to role or Service. Correspondingly, the COHBs/AWHBs comprised a number of series, including 'Series 3' for 'Naval Units and Formations', 'Series 4' for 'Army Formations', 'Series 7' for 'Units for Beach Maintenance', 'Series 8' for 'Air Forces', and 'Series 10' for 'Commando and Raid Technique'.⁶⁸³

One of the more notable of these manuals was No. 8a, *Employment of Air Forces in Amphibious Warfare*. Promulgated in 1952, it addressed both 'the Royal Air Force and Naval Aviation' as essentially inter-changeable, which would have been impossible in the US considering the current state of disagreement between the US Air Force and the other services.⁶⁸⁴ Probably the most significant manual, however, was AWHB No. 4a, *The Battalion with Supporting Arms in the Amphibious Assault*, which was released in 1956, notably in the wake of the re-organisational downsizing and partial consolidation of the AWHQ establishment. In one of its introductory paragraphs, this Handbook effectively underscored the inherently joint nature of amphibious operations and, on the eve of one of the most famous 'combined operations' in

⁶⁸² See page 175 above.

⁶⁸³ See Appendix X for a complete list of planned publications as outlined in *The Manual of Combined Operations*, 1950.

⁶⁸⁴ AWHQ (CAW), AWHB No. 8a, *The Employment of Air Forces in Amphibious Warfare*, 1952 (DEFE 2/1768; NA).

British history, thus reinforced one of the main differences between British and American amphibious/expeditionary courses of development.⁶⁸⁵

It should be understood that there is no “black magic” in the various aspects of amphibious warfare. *By virtue of the fact that two or more of the fighting services are always involved* and that it depends upon a large degree of close co-operation, careful planning and exact timing, it is perhaps a little more complicated than some other forms of warfare.⁶⁸⁶

A similarly arranged set of publications, which also reflected the British joint approach toward amphibious/expeditionary operations, was the Amphibious Warfare Policy Statements (AWPS) series, whose ‘function...[was] to present the overall policy of Amphibious Warfare, as a basis for thought, planning and teaching within Amphibious Warfare Headquarters and the School of Amphibious Warfare’.⁶⁸⁷ Accordingly, the series was arranged according to subject, or ‘Item’, as follows:

- I. General
- II. Amphibious Assault by Battalion/Commando...
- III. Amphibious Raiding
- IV. Maintenance Over Beaches and Through Damaged Ports
- V. Withdrawal of a Large Force
- VI. Amphibious Assault in a Nuclear War
- VII. Defence Against an Assault Landing
- VIII. Training – SAW Curriculum⁶⁸⁸

Each ‘Item’ area, in turn, comprised a number of subsidiary statements, which provided details about particular aspects of each subject.

Whilst the above arrangement clearly reflected the joint-service organizational approach taken by the British, a few of the individual Statements reinforced the joint nature of system more specifically. One straightforward example was Number 102, which was simply a reprint of the existing ‘Directive to Chief of Amphibious Warfare’ who, as discussed previously, continued to be developmentally responsible for a broad range of joint amphibious enterprises.⁶⁸⁹ Probably the most significant Statement, however, was Number 202, ‘Forces Available’, which, whilst

⁶⁸⁵ AWHQ (CAW), AWHB No. 4a, *The Battalion with Supporting Arms in the Amphibious Assault, 1956* (DEFE 2/1760; NA).

⁶⁸⁶ AWHB No. 4a, 1. Emphasis added.

⁶⁸⁷ CAW, [AWPS], ‘Introduction’, 1.2.56 (DEFE 2/1889, Docket No. AW 554/56, folio 3; NA).

⁶⁸⁸ CAW, [AWPS], ‘Index’, n.d. (DEFE 2/1889, Docket No. AW 554/56, folio 3; NA), 1-2.

⁶⁸⁹ CAW, AWPS I/102, ‘Directive to Chief of Amphibious Warfare’, 1.2.56 (DEFE 2/1889, Docket No. AW 554/56, folio 3; NA), 1-3.

specifically listing the three Commandos of ‘3 Commando Brigade RM’ as an option, began by presenting the standard option: ‘Any Infantry Battalion with appropriate sub units of supporting arms and Services provided they are at a satisfactory level of military training, and have had the necessary specialized amphibious training as a team’.⁶⁹⁰ Finally, two particularly interesting observations can be made about Number 601, ‘Limited War’, which, as noted above, fell under ‘Item’ VI, ‘Amphibious Assault in Nuclear War’. Somewhat ironically, considering the general lack of attention given to the offensive employment of nuclear weapons in limited war, the first addressed exactly this issue, noting that if ‘there [was] a possibility of nuclear retaliation, the employment by us of atomic missiles in plentiful numbers would be imperative’. Less serious but much more prescient was the conclusion reached about the future role of amphibious landings within the wider purview of joint operations, which was simply that: ‘Amphibious operations will become increasingly complementary airborne/seaborne operations’.⁶⁹¹ Whilst an operational example of this would be witnessed by the end of the year and again in 1961, the evolution of a distinct ‘joint warfare’ concept and corresponding organisation would follow over the course of the next half dozen years.

Operation MUSKETEER: Suez, 1956

In early November 1956, British and French seaborne and airborne forces launched Operation MUSKETEER. This was, according to one source, an ‘old style amphibious operation’,⁶⁹² which resembled the ‘combined operations’ that had characterised the ETO during World War—except on a smaller scale—and involved an integrated seaborne and airborne attack. Although sometimes referred to as a military failure, the consensus maintains that the military operations were mostly successful and that political interference precluded the military objectives from being achieved.⁶⁹³

⁶⁹⁰ CAW, AWPS II/202, ‘Forces Available’, 1.2.56 (DEFE 2/1889, Docket No. AW 554/56, folio 3; NA).

⁶⁹¹ CAW, AWPS VI/601, [‘Limited War’], [5.56] (DEFE 2/1889, Docket No. 554/56, folio 4; NA), 3-6.

⁶⁹² Speller, *Role*, 200; ‘Role’, 163.

⁶⁹³ See, for example, Speller, Ian, ‘The Suez Crisis: Operation MUSKETEER, November 1956’ in Lovering, 397-412. See also Fullick, Roy, and Geoffrey Powell, *SUEZ: The Double War* (Barnsley: Pen & Sword Books, Ltd., 2006; first published 1979); Jackson, Robert, *SUEZ: The Forgotten Invasion* (Shrewsbury: Airlife Publishing Ltd., 1996; first published 1980 as *Operation Musketeer*); Fergusson, Chapter XVI; and Grove, *Vanguard*, Chapter Five;

Planning for this enterprise involved a number of sequential phases, beginning with the composition of an 'outline plan' by the JPS, which established the Task Force concept and forces required. This was followed by the first 'Musketeer' plan, which was based upon 'an initial air assault to neutralise the Egyptian Air Force, followed by a joint assault on Alexandria, with a build-up and break-out along the desert road towards Cairo and an advance across the Delta to the Canal'. "'Musketeer" Revise' replaced this original version and was divided into three phases, which culminated in a 'joint assault against Port Said, followed by a build-up and break-out down the length of the Canal'.⁶⁹⁴

Although this 'Revise' plan was ultimately adopted (and executed), mention should be made of two 'last minute revisions'—involving Operation OMLETTE⁶⁹⁵ and Operation TELESCOPE—the latter of which involved landing 'the parachute forces a day in advance of the main assault'. While the original reason for this was to pre-empt 'a possible order for a cease fire by the United Nations', it was also hoped that this show of force would be enough to force the Egyptians to capitulate and/or allow the main assault to land with little, if any, opposition.⁶⁹⁶

Two things were noteworthy of these plans that helped distinguish Britain's approach towards amphibious/expeditionary operations as having inherently joint characteristics. At the operational level, they all included some sort of joint airborne/seaborne assault scheme which, as mentioned above, resembled the classic 'combined operations' enterprises employed during World War II, although on a much smaller scale. At the tactical level, the jointness of the purely amphibious part of the operation was distinguished by the fact that the Commandos had to be supplemented by Army supporting arms and support units, which was inherently different from the US Marine Corps' Fleet Marine Force that had all of its supporting elements organic to the formation.

As a matter of fact, two parallel themes emerged from Operation MUSKETEEER's after-action analyses, both of which also related to Britain's joint approach to

⁶⁹⁴ Air TF Commander (RAF), 'Report on Operation "Musketeer"', 27.11.56 (AIR 20/10746; NA), 2-3.

⁶⁹⁵ —, 'Operations of Allied Forces Against Egypt – Operation Musketeer', 11.56 (ADM 205/150, no folio; NA), 6.

⁶⁹⁶ 'Report', 2-3.

amphibious/expeditionary warfare development. The first fell under the more general subject area of 'flexibility of forces', which took into account both 'air operations' and 'airborne operations' as being complementary to what appeared to be a scaled-down version of the classic 'combined operation'. The second involved the more specific aspect of 'amphibious assault forces' where two related issues were addressed, one being the Commandos' lack of supporting arms and the other concerning the minimum size of the operational formation required to conduct a true amphibious assault against opposition.

With regard to 'air operations', one of the primary factors involved in the success of MUSKETEEER was the air support provided by the carriers in the Mediterranean, particularly with regard to the support given both the airborne and seaborne landings.⁶⁹⁷ More significant was the value placed on 'airborne' forces (and operations), which were 'clearly the ideal type of forces for such operations'.⁶⁹⁸ Indeed, it appeared that airborne forces were valued even higher than seaborne forces, judging from the priorities recommended by the Commander-in-Chief, Allied Forces. First was the requirement for '[s]ufficient airborne forces complete with supporting weapons and transport and load carrying transport aircraft'; this was followed by '[a]ssault forces complete with sufficient landing craft'.⁶⁹⁹

This situation notwithstanding, praise for the Royal Marine Commandos in MUSKETEEER was almost unanimously positive, except in one particular area. As the Commander-in-Chief, Allied Forces, concluded in his post-operation recommendations, 'they do not possess supporting arms such as guns and therefore...army formations must always include such operations in their training'.⁷⁰⁰ Supporting the above critique was the generally accepted proposition, even by the Admiralty, that 'a Brigade Group [was] the smallest force capable of sustained operations against opposition. Anything smaller must be regarded as a raiding force or

⁶⁹⁷ [Admiralty], 'Naval Report on Operation Musketeer', 15.2.57 (ADM 116/6209; NA), 1-2, 7. See also General Sir Charles F. Keightley, C-in-C Allied Forces, 'Certain Specific Recommendations (Operations in Egypt, November to December, 1956)', [1957] (DEFE 7/1081; NA), 12-13.

⁶⁹⁸ 'Recommendations', 18.

⁶⁹⁹ 'Recommendations', 19.

⁷⁰⁰ 'Recommendations', 14.

as subsidiary to the main operation'.⁷⁰¹ In arriving at this conclusion, a number of smaller formations were analysed, including a 'battalion group', a 'two battalion group' and a 'brigade group'. With regard to the first, it was determined that:

[a] force of this size has insufficient strength on its own to do more than seize a very small bridgehead. It has no reserves and can only remain in close contact with the enemy for a limited period. It can, in fact, only be regarded as a raiding force with a limited objective and a limited period ashore before:- (a) Withdrawal is necessary. (b) Contact with friendly troops ashore is effected.⁷⁰²

This was particularly significant because the previously discussed 'operational requirements' report of March 1954, had determined that 'a force of about the size of a battalion group with appropriate lift should be adequate' for possible assault landing operations 'against light opposition'. As a result of this discrepancy, there appeared to be a sizeable gap between possible requirements and current capabilities.

As the 'two battalion group' was simply deemed 'too weak to be effective and lack[ed] balance', only the 'brigade group' was judged 'capable of independent sustained action', for three reasons. The first centred on its ability to attack 'on a reasonably wide front (two battalions up)...to overcome opposition and secure a bridgehead'. Second, it had a reserve with which it could launch counter-attacks, initiate breakouts, or relieve/refit units, if necessary. Lastly, it could allow a follow-up force to pass through its bridgehead 'against reasonable opposition', provided it had 'a two battalion assault lift' (or helicopters).⁷⁰³ This latter lift requirement also seemed to conflict directly with the scale stipulated in the 1954 'operational requirements' assessment (as mentioned above), which meant that the Amphibious Warfare Squadron was woefully short of sufficient lift to launch a truly viable amphibious assault operation (*i.e.*, at brigade group scale against opposition) at short notice. According to the MUSKETEEER analysis, in fact, it appeared that the Amphibious Warfare Squadron and Commando Brigade were technically only capable of launching large-scale raids!

⁷⁰¹ 'Naval Report', 7.

⁷⁰² 'Naval Report', 95.

⁷⁰³ 'Naval Report', 95.

CONCLUSION

From the various observations discussed above, it was evident that the course of British amphibious/expeditionary development generally continued on from the consolidation period of the late 1940s, which remained joint (*i.e.*, inter-Service) in character. This was particularly demonstrated by the (joint) nature of the Suez operation, both with regard to the simultaneous employment of airborne and seaborne forces to mount an assault along the lines of the Normandy invasion (but obviously on a smaller scale) and with regard to the fact that the RM Commandos were supplemented by Army supporting arms, which not only included artillery and armour but also such items as anti-tank units and weapons. As a result, this left the British joint approach towards amphibious/expeditionary warfare development largely opposed to the American single-service (*i.e.*, naval) approach that was prevalent at the time, although by the turn of the decade, these trends seemed to soften in both countries.

PART THREE: 1957-1968

AMERICAN AND BRITISH COMPROMISE...OR DEBATE?

Following on from the early and mid-1950s, the 1957-1968 period continued to witness a general trend of developmental convergence between (and within) the United States and the United Kingdom. This was perhaps most notably illustrated by the promulgation of newly-approved, American joint amphibious doctrine by NATO in 1968. However, at the same time, it was also evident that certain significant differences continued to exist, not only internationally but also within each subject country.

In the US, whilst the US Naval Service advanced its 'future concept' by gradually procuring helicopters and amphibious shipping as well as by conducting increasingly larger exercises, all of the services continued to work on formulating viable joint amphibious operations doctrine. This effort first bore fruit in 1962, with agreement having been reached between the Naval Service and the Army. The Air Force eventually concurred with a newly-revised edition in 1967, a 'sanitized' version of which, as mentioned above, was adopted by NATO the next year. At the same time, both the Army and, to a lesser extent, the Air Force continued to develop what were ultimately *expeditionary* capabilities, which included such areas as doctrine promulgation and equipment procurement. From an operational standpoint, however, these joint developments appeared to be overshadowed by an expansion of the Naval Service's amphibious capabilities and by early amphibious operations conducted during the Vietnam War, which were performed almost exclusively by the Navy and Marine Corps. Not only did this seem to illustrate the Department of the Navy's domination of the amphibious warfare field in general, but it also revealed specific underlying differences amongst the services with regard to both concept and execution.

In Britain, yet another review of the changing geo-strategic situation ultimately caused the Royal Navy to shift its own strategic priorities and, correspondingly, its force structure. This resulted in the initial conceptualisation of the 'commando carrier force' initiative which, by 1962, had evolved to predominate almost the Royal Navy's entire *raison d'être* (aside from

aircraft carriers). As this scheme was being implemented, mainly through the procurement of amphibious shipping and the expansion of the Royal Marine Commandos, it was overtaken by the formulation of the 'seaborne/airborne/land operations' concept by AWHQ which, after effectively being tested operationally in Kuwait in mid-1961, ultimately evolved into the 'joint warfare' concept. This, in turn, resulted in a complete institutional re-organisation that amalgamated AWHQ into a new 'Joint Warfare' structure that included not only a 'Committee', a 'Staff' and an 'Establishment', but also a specific sub-committee for amphibious warfare. Whilst the Royal Marine Commandos found themselves playing an increasingly central role in this new arrangement by providing the core of the seaborne (light) infantry required for the amphibious side of 'joint warfare' operations, there were still a few fundamental differences that distinguished them from the USMC's FMF, particularly with regard to force structure. Although Commando units consisted of specially trained marines and were mostly employed as highly mobile, light rapid reaction forces, they lacked organic fire support elements such as armour and (light and heavy) artillery—not to mention also organic air elements—which had to be supplied by the Army, thus restricting the Commandos' *exclusive* use to so-called 'cold war' operations. This was opposed to the American FMF units which, whilst comprising 'air-ground' teams of fully-integrated 'combined arms' that included armour, (light) artillery, combat engineers, and even organic air support, were exclusively employable in 'cold war', 'limited war', and even certain 'general war' situations. In short, whilst the Commandos were essentially lighter, specially-trained and -organised forces that performed amphibious tasks (amongst others), like their protégés—the US Army Rangers—in World War II, FMF units were heavier, amphibiously-trained and -organised forces that sometimes performed special tasks, as their nation's 'force-in-readiness'.

CHAPTER FIVE: THE UNITED STATES, 1957-1968

OVERVIEW

As with the previous two chapters that discussed American amphibious/expeditionary warfare developments up to 1957, the subsequent period up to 1968 has also been generally portrayed as being pre-dominated by naval developments.⁷⁰⁴ The US Naval Service did, indeed, gain significant ground in this regard, due primarily to the gradual but deliberate procurement of helicopters and amphibious shipping. This enabled it to conduct division-size amphibious assault exercises over long distances in the mid-1960s, which was an indication that it was at least on the verge of attaining a true *expeditionary* capacity. However, a number of notable developments by the other services did take place, a fact that has been largely overlooked, at least until very recently.⁷⁰⁵

On the one hand, the most evident example of *joint* development was the adoption of so-called joint ‘doctrine for amphibious operations’. This was achieved first by the Naval Service and the Army in 1962, and then also by the Air Force in 1967. Indeed, a ‘sanitized version’ of this exact doctrine was also adopted by NATO one year later. On the other hand, the Army and, to a lesser extent, the Air Force continued to forge ahead with their separate *expeditionary* efforts, although these generally declined over time during the 1960s. By far the most significant aspect of Army development was the continued promulgation of uni-service doctrine and concepts, which still tended to emphasise the characteristics of the large-scale ‘joint amphibious operations’ or ‘invasions’ that had taken place during World War II.

Even with these joint and Army advances, by 1968 it appeared that the Naval Service had, in fact, been able to dominate, if not actually monopolise, most aspects of amphibious/expeditionary warfare development. Not only was this evidenced by the aforementioned expanded amphibious capabilities but it was also due to the fact that almost all of

⁷⁰⁴ See Introduction, 15-18.

⁷⁰⁵ See Introduction, 21.

the amphibious operations during the first few years of Vietnam War were conducted solely by the US Navy and Marines, which had formed two special (floating) formations to do so.

STRATEGIC ASPECTS

The period 1957-1968 can generally be characterised as one of strategic transition from a reliance on 'massive retaliation', which was based on the employment of overwhelming strategic and tactical nuclear forces in cases of 'general war' with the Soviet Union, to the adoption of a strategy of 'flexible response', which emphasised (in addition to nuclear retaliation) the employment of strategic and tactical (nuclear-capable) conventional forces in 'cold', 'limited' and even some 'general' war scenarios, particularly in the most unstable regions of the world. This was significant from an amphibious/expeditionary warfare development standpoint mainly because this latter strategy vastly increased the demand for strategically (and tactically) mobile and ready conventional forces that needed to be deliverable by either seaborne or airborne means, or both. Although this category seemed to describe the Fleet Marine Force (FMF) of the Naval Service and even seemed to dovetail with the Marine Corps' helicopter-centric 'concept for future amphibious operations', so too did the airborne and air-transportable forces of the US Army, which not only were based around the globe near certain regions of instability but also would soon exist as a ready, strategic reserve in the continental United States. Indeed, the complementariness of air-lifted and sea-lifted forces, which also characterised similar British forces and the operations in which they participated, was aptly demonstrated in all three of the most significant contingency operations that took place during this period; in Lebanon in 1958, during the Cuban missile crisis in 1962, and in the intervention in the Dominican Republic in 1965.

Defence Policy

Most general accounts trace the evolution of the 'flexible response' strategy as beginning in 1961, the first year of the Kennedy administration.⁷⁰⁶ A few scholars have pointed out that this

⁷⁰⁶ See Gaddis, *Strategies*, ix, Chapter 7.

process actually began as early as 1957, if not before. This is argued not only from the perspective of nuclear strategy but also from a conventional force posture standpoint.⁷⁰⁷ Central to the strategic phase was the concept of ‘limited war’, which also emerged on the public stage in 1957.⁷⁰⁸ Although the general notion had actually found its way into the Basic National Security Policy (BNSP) documentation prior to 1957,⁷⁰⁹ it was the introduction of a ‘new strategic concept’ in February of that year that proved seminal, indicating that a shift in emphasis from ‘general war’ to ‘limited war’ was underway.⁷¹⁰ Simply put, this new concept now identified ‘two military eventualities: (a) cold war or military conflict short of general war and (b) general war initiated with an atomic onslaught by the Soviets...’. As a result, America’s ‘military posture’ needed to be changed to provide:

- (1) A forward deployment of US ready military forces...both to counter local aggression and to carry out the initial tasks of general war.
- (2) Mobile ready forces, principally based on US territory, which can be deployed rapidly to provide reinforcement to forward deployed forces...or to fight unassisted....
- (3) An atomic retaliatory capability....
- (4) A defense system...to protect the war-making capacity and resources of the Western Hemisphere.
- (5) Forces as necessary to provide the capability of maintaining essential land and sea and air communications.⁷¹¹

From the above classifications, it was quite evident that amphibious forces, which were ‘forward deployed’ almost by definition, fell into the first category and therefore were to receive primary focus in the future. A bit less evident, perhaps, were those (ground and air) forces already forward deployed and easily (and quickly) transportable (mainly by air), which also seemed to fall into the first category. These included, for example, Army and Air Force forces garrisoned in Europe, which could be quickly and relatively easily dispatched to the Mediterranean and Middle East if required (as they were for the Lebanon crisis in 1958). More significant in the future,

⁷⁰⁷ Freedman, Lawrence, *The Evolution of Nuclear Strategy*, 2nd edn. (Houndmills/London: Macmillan Press, Ltd., 1989), Chapters 7, 8; and Heuser, Chapter 2.

⁷⁰⁸ Lincoln, G. A. (Col., USA), and A. A. Jordan (Lt. Col., USA), ‘Limited War and the Scholars’, *MR*, 37:10 (1/58), 60. See also Kissinger, Henry A., *Nuclear Weapons and Foreign Policy* (Garden City, NY: Doubleday & Co., Inc., 1958; first published June 1957); and Osgood, Robert E., *Limited War: The Challenge to American Strategy* (Chicago, IL/London: The University of Chicago Press, 1957).

⁷⁰⁹ Annexes to NSC 5422, 6/14/54, in *FRUS*, 1952-54, Vol. II, *National Security Affairs*, Part 2 (Washington, DC: GPO, 1984), 675, for the phrase ‘limited military aggression’.

⁷¹⁰ SecDef, Memorandum to Executive Secretary, NSC, 2/25/57, in *FRUS*, 1955-57, Vol. XIX, *National Security Policy* (Washington, DC: GPO, 1993), 419-424.

⁷¹¹ SecDef, Memorandum, 424.

however, were Army (and later Air Force) forces, stationed in the US, that fell into the *second* category, which would also receive the bulk of attention (and therefore financial support) over the next decade even though the requirement for some form of ‘strategic reserve’ had been identified as early as mid-1954.⁷¹²

The dual nature of the new strategic concept was noted—albeit not in very much detail—in subsequent BNSP documents in 1957 and 1958, although ‘general war’ still seemed to be the top priority in 1959.⁷¹³ Yet another BNSP was drafted though, which outlined the future elements of US strategy that would essentially become ensconced as the central tenet of American defence policy for the next decade (and longer), where

the United States and its allies in the aggregate will have to have, for an indefinite period, military forces with sufficient strength, flexibility and mobility to enable them to deal swiftly and severely with Communist overt aggression in its various forms and to prevail in general war should one develop.⁷¹⁴

War Planning and Contingency Operations

As strategic attention shifted from ‘general’ war to ‘cold’ and, more importantly, ‘limited’ war scenarios, so too did the focus of war planning. This was not to say that planning for general war had stopped, or even slowed much for that matter. Each military service regularly produced a military ‘Capabilities Plans’ (MCP) that outlined the various force levels required for each potential war scenario, although details about forces’ probable employment were largely missing. For example, the Marine Corps’ 1960 ‘MCP-60’ generally provided that, within twelve months of D-day, ‘three Marine Divisions [and] three Marine Aircraft Wings...[would] be deployed to the European-Mediterranean Area’, whilst an additional ‘Marine Division [and] one Marine Aircraft Wing...[would]...remain deployed in the Pacific Western Area’.⁷¹⁵ More specific requirements were laid out by each unified command war plan, such as those by USCINCEUR, which called for Marine Corps forces ranging from ‘1/9 of a Div/Wing Team initially’ in the case

⁷¹² NSC 5422, 6/14/54, in *FRUS*, 1952-54, Vol. II, *National Security Affairs*, Part 2 (Washington, DC: GPO, 1984), 647-667.

⁷¹³ NSC 5707/8, 6/3/57, in *FRUS*, 1955-57, Vol. XIX, *National Security Policy* (Washington, DC: GPO, 1993), 507-524; and NSC 5810/1, 5/5/58, and NSC 5904/1, 3/17/59, in *FRUS*, 1958-60, Vol. III, *National Security Policy; Arms Control and Disarmament* (Washington, DC: GPO, 1996), 98-116, 207-210.

⁷¹⁴ NSC 5906/1, 8/5/59, in *FRUS*, 1958-60, Vol. III, 292-316.

⁷¹⁵ CMC, ‘Letter of Promulgation [MCP-60]’, 6/19/59 (RG 127: VHQMCD, Box 2, [File f]; NARA), I-16.

of USCINCEUR PLAN 200-12, which focused on the region of Italy during ‘[g]eneral war or just prior to its outbreak’, to ‘2 Div/Wing Teams’ in the case of USCINCEUR PLANs 100-2 and 100-3, the former of which was ‘EUCOM’s basic general war plan’.⁷¹⁶ Neither plan, again, provided details about how these forces were to be used.

As the number of ‘limited’ and ‘cold’ war scenarios increased, so too did the variations in force levels required for various contingency war plans. This was particularly relevant for the Marine Corps which, by the early 1960s, had essentially established three standing, forward-deployed amphibious formations of battalion size to act as the nation’s ‘force-in-readiness’, located in the Mediterranean (since the late 1940s), the Western Pacific (since the late 1950s), and the Caribbean (since 1959/60). Contingency plans for Latin America, for example, which were contained in CINCARIB’s 6- series plans, generally required force levels of up to RLT/MAG size, for possible use in the ‘Brazil’/‘Uruguay-Argentina’, ‘Colombia-Ecuador’, and ‘Peru-Chile’ areas.⁷¹⁷ European limited war plans called for a total of two BLT/MAG formations, one for Yugoslavia (USCINCEURPLAN 100-4) and ‘another for general use in cold war situations anywhere in the EUCOM area’ (CINCLANT PLAN 310-59; USCINCEUR PLAN 100-1). For the Middle East and Mediterranean, CINCSPECOMME’s 215- series plans, of which there were fourteen variations covering 1958 and 1959, required forces ranging from a single BLT (for Lebanon or Jordan), to a single BLT/MAG (for Iraq), to a full RLT/MAG plus an additional BLT/MAG (for Morocco). The most FMF units and supporting forces, however, were earmarked for the Far East with up to one division/wing team each for Indonesia and Vietnam and up to two divisions/wings each for Korea and Taiwan.⁷¹⁸

Overall, it is interesting to note that the limited war force distribution for the Marine Corps was far larger in the Pacific (the Naval Service’s historical launching point for amphibious warfare in ‘total war’) and represented the polar opposite of force distribution for general war

⁷¹⁶ Historical Branch (G-3), HQ, USMC, ‘Historical Examination of Marine Corps Amphibious and Force in Readiness Commitments Since 1945’, 1/7/60 (RG 127: VHQMCD, Box 2, [File c]; NARA), C-5.

⁷¹⁷ ‘Historical Examination’, V-1, C-4.

⁷¹⁸ ‘Historical Examination’, V-1 – V-2, Tab 3 (C-1 through C-5).

force requirements, which concentrated on Europe and the Mediterranean. At the same time, although it was evident that the number of limited and cold war contingency plans had proliferated considerably, it was the quality of these war plans that came into question. This was evidenced by the lack of overall coordination in all three of the major joint contingency operations that were conducted between 1958 and 1965,⁷¹⁹ all of which demonstrated the loose characteristics of what the British would eventually embrace as so-called ‘seaborne/airborne/land operations’. Indeed, even after the intervention in Lebanon in 1958 and the near-intervention/invasion of Cuba in 1962, the outgoing Chairman of the Joint Chiefs of Staff, Army General Maxwell Taylor, complained about this exact lack of quality as late as mid-1964. ‘...I have been impressed by the incompleteness of our past contingency planning’, he said, noting that ‘our other contingency plans are little more than outlines which could not be expanded for implementation other than on a “crash” basis without months of additional staff work both in the field and in the Joint Chiefs of Staff’.⁷²⁰ This assessment would prove true yet again in the last of the major joint contingency operations of the time period in the Dominican Republic in 1965.⁷²¹

ORGANISATIONAL/INSTITUTIONAL ASPECTS

As a result of the combination of scientific advances in modern weaponry and delivery systems, most notably nuclear devices (and their means of delivery, including nuclear submarines and particularly ballistic missiles), and their concomitant rise in costs, the

⁷¹⁹ For Lebanon, for example, see various documents in *FRUS*, 1958-1960, Volume XI, *Lebanon*, 9-10, 54, 60, 150-152, 231; HQ (G-3), US Army, Europe, ‘The US Army Task Force in Lebanon’, 1959 (author’s copy); Gray, David W., (MG, USA, Ret.), *The US Intervention in Lebanon, 1958: A Commander’s Reminiscence* (Ft. Leavenworth, KS: CSI, USA C&GSC, 8/84); Schulimson, Jack, *Marines in Lebanon, 1958*, Marine Corps Historical Pamphlet (Washington, DC: Historical Branch, G-3 Division, HQMC, 1966); and Spiller, Roger J., “*Not War But Like War*”: *The American Intervention in Lebanon*, Leavenworth Papers, No. 3 (Fort Leavenworth, KS: CSI, USA C&GSC, 1/81); Wade, Gary H. (LCOL, USA), *Rapid Deployment Logistics: Lebanon, 1958*, Research Survey No. 3 (Ft. Leavenworth, KS: USA C&GSC, 10/84). For Cuba, see various documents in *FRUS*, 1961-1963, Volume X, *Cuba, 1961-1962*, 732-733, 749-756, 886-892, 917-920, 1082-1083, 1089-1090; and in Volume XI, *Cuban Missile Crisis and Aftermath*, documents 13, 17, 150, and 186. See also CINCLANT, ‘CINCLANT Historical Account of Cuban Crisis – 1963 (U)’, 4/29/63 (RG 127: RRPASUMCR&HS, Box 11, File 8, Parts 1 & 2; NARA), especially 17-57.

⁷²⁰ CJCS, ltr to SecDef, 7/1/64, in *FRUS*, 1964-68, Vol. X, *National Security Policy* (Washington, DC: GPO, 2002), 97-101.

⁷²¹ See, for example, Palmer, Bruce, Jr., *Intervention in the Caribbean: The Dominican Crisis of 1965* (Lexington, KY: P The University Press of Kansas, 1989); Schoonmaker, Herbert G., *Military Crisis Management: US Intervention in the Dominican Republic, 1965*, Contributions in Military Studies, Number 95 (Westport, CT: Greenwood Press, 1990); Yates, Lawrence A., *Power Pack: US Intervention in the Dominican Republic, 1965-1966*, Leavenworth Papers, Number 15 (Ft. Leavenworth, KS: CSI, USA C&GSC, 1988). See also ___, ‘CHRONOLOGY – US Marine Corps Operations in the Dominican Republic, April-June 1965’ (1988); and ___, ‘US Marine Operations in the Dominican Republic, April-June 1965’, n.d. (RG 127: RG&AU, Box 19, File 5; NARA).

Department of Defense came under another round of financial and organisational scrutiny.⁷²²

This was magnified by President Eisenhower's specific concern 'that fierce inter-service rivalries had been re-kindled'.⁷²³ As a result, the President, in his State of Union message in January, prioritised another examination of the defence establishment and, on 3 April 1958, proposed yet another re-organisation effort to Congress.⁷²⁴ In announcing his intentions, the President listed the underlying principles behind his rationale for more changes.

First, separate ground, sea, and air warfare is gone forever. If ever again we should be involved in war, we will fight it in all elements, with all services, as one single concentrated effort. Peacetime preparatory and organizational activity must conform to this fact. Strategic and tactical planning must be completely unified, combat forces organized into unified commands, each equipped with the most efficient weapons systems that science can develop, singly led and prepared to fight as one, regardless of service.⁷²⁵

Parts of the speech seemed to echo the message of the British 'RAW Committee' of 1944 when it argued that the COHQ organisation needed to have a permanent establishment so that the knowledge gained and lessons learned could be retained and continued. However, the whole philosophy of increased integration of the armed forces was generally opposed by the Department of the Navy, as it had been since the late 1940s.

1958 Defence Re-organisation Act

Underlying this resistance was the fear that increased integration would weaken—if not separate—the already integrated surface, air and ground forces of the Naval Service which, in effect, would undermine the whole concept of 'sea power'. In addition, the Navy's senior leadership, notably the CNO, also feared that Army and Air Force officers continued to misunderstand the 'sea power' concept and would therefore misuse the country's otherwise invaluable naval (including amphibious) forces.⁷²⁶ Finally, still others within the defence

⁷²² *Organizational Development*, 35-44.

⁷²³ Schwartz, 90.

⁷²⁴ 'President Eisenhower's Message—3 April 1958' in Cole..., 175-187.

⁷²⁵ 'President Eisenhower's Message', 175.

⁷²⁶ Schwartz, 92.

establishment even ‘feared that passage of the legislation would lead to the merger of the Services or the abolition of the Marine Corps’.⁷²⁷

After lengthy negotiations and some (minor) compromise, Congress approved and the President signed into law, the ‘Department of Defense Reorganization Act of 1958’.⁷²⁸ As with all previous legislation that increased centralisation over the defence establishment, this law was no different. The main thrust of these changes was to consolidate further the Secretary of Defense’s control over the armed forces at the expense of the military departments and their Chiefs.⁷²⁹ From the Naval Service’s point of view (and specifically that of the Marine Corps), this meant that the major services would be increasingly precluded from waging their own land, air and sea (or naval) campaigns; instead, there would be increasing pressure to mount joint operations using land, air and sea elements. In other words, the integrated ‘amphibious operations’ that were usually conducted by the Navy and Marine Corps (as a single Naval Service) were apparently having to give way to the employment of ‘joint amphibious operations’ by the Departments of the Army, Navy and Air Force, which ultimately resembled the traditional British practice. This trend seemed applicable to the formulation of various doctrines, particularly those for amphibious/expeditionary warfare that frequently required the resolution of disputes at departmental (or even higher) levels. As a result, it appeared that ‘the Marine Corps responsibility for landing force doctrine and development [had] become less secure’.⁷³⁰

Changes to the ‘Functions Paper’

At the same time, there were some who thought that the changes did not go far enough.⁷³¹ This sentiment became apparent even after a new DOD Directive covering the functions of the armed forces was issued on 31 December 1958 as a result of the aforementioned

⁷²⁷ *Organizational Development*, 39.

⁷²⁸ ‘*Department of Defense Reorganization Act of 1958—6 August 1958 (72 Stat. 514)*’ in Cole..., 188-230.

⁷²⁹ ___, ‘Key Features of President’s Plan for Reorganization of the Department of Defense’, n.d. (RG 127: RRMOT&O, Box 2, File 5, Part 2; NARA).

⁷³⁰ ___, ‘Summary on the Effect of Defense Reorganization Act on Marine Corps and the Commandant of the Marine Corps’, [1958/9] (RG 127: RRMOT&O, Box 2, File 5, Part 2; NARA), 5. See also *Organizational Development*, 39.

⁷³¹ Gilman, Seymour I., (Col. USA), ‘A New Concept for Military Organization’, *MR*, 38:1 (4/59), 36-42.

Reorganization Act.⁷³² Although there were no significant changes that affected amphibious/expeditionary warfare development directly, there were a few more subtle changes that bear mentioning as they had been topics of discussion related to this development.

First, the Secretary was given the power to transfer, reassign, abolish or consolidate the functions of the armed forces providing the proper procedures were followed. This was something that the Naval Service had long feared and opposed considering past efforts by the Army to usurp the Marine Corps' responsibilities with regard to amphibious warfare development. Next, the JCS were no longer required to approve joint operations doctrine, such as for amphibious or airborne operations. This was to be done amongst the Services at the departmental level which, somewhat ironically considering the recent history of the Joint Amphibious Board, eventually met with success.

Finally, there were two semantic items of note. First, the phrase 'three major services' was no longer used in the document, which seemed to indicate that the Marine Corps had officially become the co-equal of the other Services. However, the fact that the Commandant still only sat in with the JCS on matters pertaining directly to amphibious operations appeared to show otherwise. Second, although the term 'joint amphibious operations' was still employed throughout the document, the definition of 'amphibious operations' in the Glossary was removed; consequently, so was the controversial phrase 'the amphibious phase of a joint amphibious operation'.⁷³³ This latter action proved the most interesting as all of the Services, after the failure of the Joint Boards, would successfully draft, negotiate and approve doctrine for joint amphibious warfare over the course of the next decade.

TACTICAL/OPERATIONAL ASPECTS

Whilst the mid-1950s were marked by considerable—and apparently irreconcilable—disagreement amongst the Services, the period between 1957 and 1968 was characterised by some significant convergence, specifically in the area of joint doctrine. On the one hand, naval

⁷³² 'Department of Defense Directive No. 5100.1—31 December 1958' in Cole..., 316-324.

⁷³³ 'Department of Defense Directive No. 5100.1...' in Cole..., 318-324.

efforts focused on implementing the ‘future concept’, which centred on three areas: the reorganisation of the FMF, helicopter procurement, and amphibious shipping procurement. This was paralleled by an expansion in the size of amphibious exercises, almost to the point of reaching a truly large-scale, *expeditionary* capability. On the other hand, ‘joint’ efforts concentrated on the promulgation of joint amphibious doctrine, which was eventually achieved in two successive stages, ending in 1962 and 1967, respectively. At the same time, the Army (and, to a lesser extent, the Air Force) continued to develop its own unilateral amphibious/expeditionary doctrine. As this doctrine was specifically designed for substantially larger contingencies (and therefore corresponding landing forces) than those addressed by the Naval Service, it continued to illustrate the underlying differences in concept and practice.

Naval Development of ‘Amphibious Operations/Warfare’

Naval Implementation of the ‘Concept for Future Amphibious Operations’

Re-organisation of the Fleet Marine Force

Following the unveiling of LFB-17 in December 1955, the Marine Corps focused its immediate attention on implementing its new concept. To do so first required a complete reorganisation of ‘the entire FMF, including aviation’, as determined by a special board—known colloquially as the ‘Hogaboom Board’—that was established by the CMC and which presented its final report in January 1957.⁷³⁴ The significance of this Board’s conclusions stemmed from its emphasis on the true nature of the ‘future concept’, which ultimately involved using dual helicopter-borne and seaborne means to effect an amphibious assault, an aspect that had not been stressed in LFB 17.

There appears to be a considerable body of opinion in the Marine Corps today which holds that in the foreseeable future all movement from ship-to-shore will be by helicopter. Thus the “all helicopter assault” concept has somehow become the “all helicopter concept.” This idea the board believes is invalid and should be corrected immediately....

The board believes that this line of thinking has perhaps obscured the continuing importance of crossing the beach operations in our modern concept. We believe that for the foreseeable future a substantial portion of the men and materiel required in effecting a lodgement on a hostile shore must still cross the beach in a “conventional” fashion. This

⁷³⁴ Rawlins/Sambito, 73-74. See also Clifford, *Progress*, 85-88.

is not in our opinion inconsistent with the “all helicopter assault” concept, or with the requirement for the projection of sea power ashore without the necessity of direct assault on the shoreline.⁷³⁵

Whilst perhaps ironic considering that the first tactical employment of helicopters had been successfully achieved by the British less than three months before, it is nevertheless interesting to note here how realistic and prescient this assessment was, mainly because the July 1958 amphibious landings conducted by US naval forces during Operation BLUE BAT in Lebanon were almost exclusively carried out by ‘conventional’ seaborne means.⁷³⁶

As a result of the renewed emphasis on the ‘all helicopter *assault*’, the Board ultimately determined that the ‘optimum Marine division organisation and composition’ entailed one in which the ‘the assault elements of the division [were] helicopter transportable and the entire division...air transportable’. This basically required a considerable lightening of the division’s combat, fire support and service elements. With regard to the first element, the most significant reduction occurred with the replacement of the Tank Battalion by an ‘Ontos’ Battalion, which was accompanied by an overall decrease in division personnel of 10 percent.⁷³⁷

Reductions in the fire support element centred on artillery, specifically by making ‘the battery, rather than the battalion,...the basic fire support unit’ of the division. Corresponding decreases in equipment involved the replacement of 105mm howitzers with 105mm and 120mm mortars, and the replacement of 155mm howitzers by 105mm howitzers. Force Artillery, however, which could only be transported by seaborne means, still included various forms of heavy artillery as well as the atomic-capable rocket systems of the ‘truck mounted’ Honest John and the towed—and ‘helicopter transportable’—Little John.⁷³⁸

Finally, the division’s service elements also underwent a series of cutbacks. This first involved the replacement of the Service Regiment and Shore Party Battalion by a single Service Battalion which, at first glance, appeared to be ‘far too small for support of the division’.

⁷³⁵ Quoted in Rawlins/Sambito, 74. Partially quoted in Clifford, *Progress*, 87.

⁷³⁶ See works by Schulimson and Spiller as cited in footnote 719.

⁷³⁷ —, ‘FMF Organization and Composition Board Report, The Division’, *MCG*, 41:4 (4/57), 26-30. ‘Ontos’ were air-transportable, tracked vehicles, similar to LVTs, that were armed with six 106mm recoilless anti-tank rifles.

⁷³⁸ —, ‘FMF Organization and Composition Board Report, Fire Support’, *MCG*, 41:6 (6/57), 8-12.

Although the Engineer Battalion was also whittled down (and re-designated the Pioneer Battalion), two new units were proposed. The first was a Mass Evacuation Company and the second a new Force Service Regiment, although it is notable that the latter only had an estimated strength of 3,860 men, which was about half of that of the Army's Amphibious Support Brigade.⁷³⁹

Although this divisional re-organisation increased both the strategic and tactical mobility of the Marine division, all of these changes, which consisted largely of reductions in one form or another and which were fully implemented throughout the FMF by September 1958,⁷⁴⁰ seemed to reduce the overall fighting power of the Marine division. Indeed, by one account, the lighter Marine division was 'in this instance much closer to the Army's airborne division whose organization was also circumscribed by the need for air transportability'.⁷⁴¹ It was this exact aspect of Marine Corps landing forces that the Army found most disconcerting in any possible future 'general war' as it perceived the Marines as being unable to sustain land combat against a first-class enemy such as the Red Army. This meant that Marine landing forces, presuming that they could successfully get ashore in the first place, would have to be replaced by heavier (army) ground forces, which was ultimately a very inefficient use of limited resources. Such an argument against specialist amphibious assault forces had been generally accepted by the British since 1944, although the latter's attitude would shift during the mid- and late-1950s as changes in the geo-strategic situation induced a reassessment of force requirements (and therefore also structure), particularly by the Royal Navy.

Helicopter Procurement

The Hogaboom Board report also included an assessment of future aviation requirements,⁷⁴² which had evolved over the course of the past year and had resulted in two major studies. The first was HQMC 'G-3 Study Number 3, a Memorandum for the

⁷³⁹ ___, 'FMF Organization and Composition Board Report, Service Elements', *MCG*, 41:7 (7/57), 20-24.

⁷⁴⁰ Rawlins/Sambito, 78.

⁷⁴¹ Mataxis, Theodore C., (Col., USA), 'The Marines' New Look', *MR*, 38:11 (2/59), 17.

⁷⁴² ___, 'FMF Organization and Composition Board Report, Aviation', *MCG*, 41:5 (5/57), 10-12.

Commandant', which was specifically titled 'Employment of Helicopters Within the FMF During the Period of 1956 to 1960'. This was the first analysis to take into account newly imposed financial restraints by the overall Navy budget, which resulted in an estimated production plan that included three types of helicopters: the HRS, the HR2S, and the new HUS, with troop-carrying capacities of 10, 23, and 12-18, respectively.⁷⁴³ The procurement numbers for the next six years ranged from a total of 180 helicopters (all HRS type) in 1956, to 210 (180 HRS/HUS; 30 HR2S) in 1958, to 285 (240 HRS/HUS; 45 HR2S) in 1960 and 1961. These numbers would permit each Marine division to lift one BLT in the assault simultaneously (*i.e.*, in a single wave) with 'an eventual goal of lifting one and one-half divisions' (or one regiment of each Marine division simultaneously). The second analysis stemmed from an initial 'basic Marine aviation objective plan for pre-mobilization' for the 1956-1961 fiscal years that was based on the 'requirements for the support of three divisions in combat short of general war'. The helicopter totals ranged from 267 helicopters (180 HRS/HUS; 15 HR2S; 72 HOK) in fiscal year 1957 to 344 (180 HRS/HUS; 90 HR2S; 54 HOK) in fiscal years 1960-1962.⁷⁴⁴

With this background information, the Hogaboom Board recommended a three-phased, graduated procurement plan that also listed the requirements for a total of ten helicopter assault ships (by 1965) to implement the new concept. Whilst the total procurement numbers estimated under this plan were similar to those in the plan described above, by 1959, plans were also put in place to begin increasing the numbers of helicopters as required, at the same time extending the overall timeframe to cover through fiscal year 1964.⁷⁴⁵ Estimated totals for these revised fiscal years ranged from 211 helicopters in fiscal year 1959 (212 HRS/HUS; 35 HR2S; 48 HOK), to 339 in fiscal year 1962 (272 HRS/HUS; 28 HR2S; 39 HOK), to 436 in fiscal year 1964 (375 HRS/HUS; 22 HR2S; 39 HOK).⁷⁴⁶ By the end of fiscal year 1962, however, even though the total helicopter inventory of the Marine Corps amounted to 412 helicopters, the capability

⁷⁴³ Rawlins/Sambito, 70; Polmar, Norman, and Floyd D. Kennedy, Jr., *Military Helicopters of the World: Military Rotary-Wing Aircraft Since 1917* (Annapolis, MD: NIP, 1981), 290-299.

⁷⁴⁴ Rawlins/Sambito, 72-73. The 'HOK' was a light reconnaissance helicopter.

⁷⁴⁵ Rawlins/Sambito, 80.

⁷⁴⁶ CMC, ltr to CNO, 3/31/59 (RG 127: RRMOP&O, Box 13, File 19; NARA), Enclosure (3).

objective of lifting and supporting an RLT from each Marine division had not yet been achieved. This was not primarily due to the ongoing financial restrictions but instead to the overall lack of HR2S helicopters, which had not been procured in the required numbers for technical reasons.⁷⁴⁷ The financial restrictions, however, would have a much more significant impact on the procurement of amphibious shipping, particularly helicopter assault carriers.

Amphibious Shipping Procurement

The last aspect concerning the naval implementation of the ‘concept of future amphibious operations’ involved the procurement of new amphibious shipping, especially the new and indispensable helicopter assault carriers. Within months of the December 1955 promulgation of LFB 17, the Marine Corps had completed a number of studies to determine the amphibious shipping requirements for operations of various sizes. Preliminary data for four such studies were presented in April 1956, which involved total carrying capacities for the first three options ranging, respectively, from ‘59,000 personnel and 17 million cubic feet of cargo’, to ‘40,000 personnel and 10.1 million cubic feet of cargo’, to a force of 40,767 men, as outlined below.⁷⁴⁸

Shipping Requirements and Capabilities of Subject Force' (1956)									
Type of Proposed Force	Numbers/Type of Ship*								
	AGC	APA	AKA	LSD	LST	APD	LPH	AP	AK
"Marine Division/Wing TF"	2/-	18/6	33/39	15/1	43/6	3/-			
"Austere D/W TF"	1/-	12/4	14/33	14/8	32/12	2/-			
"Embarkation Plan"^	1/-	5/-	6/-	8/-	12/-	3/-		- /14	- /38
"New Concept"	1/-	4/-	3/-			5/-	12/-		
^ CGFMFLANT Embarkation Plan 220B-55	* -/- configurations represent the numbers of ships required for Assault/Follow-up Echelons								

The ‘New Concept’ scenario involved a much smaller total number of ships. The number of new construction LPHs had been initially reached during a May 1955 Amphibious Warfare Conference, which ‘included a long range program’ covering fiscal years 1957-1962. By January

⁷⁴⁷ Rawlins/Sambito, 81. For details on the HR2S, see 68-69, 78.
⁷⁴⁸ See Enclosure to Cokin (Lt. Col., USMC), ltr to Buchanan (Col., USMC), 4/16/56 (RG 127: RRPPA&AO, Box 6, File 27; NARA).

1956, however, changes to the FY-57 and FY-58 programs had each resulted in ‘the substitution of one CVE conversion for...two [new] LPH’, not to mention also the elimination of a total two 20-knot LSDs and one 20-knot LST.⁷⁴⁹

Despite CMC’s repeated efforts to argue on behalf of the new construction program to execute the ‘new amphibious warfare concept’,⁷⁵⁰ he was forced to accept the planned conversion of CVE-105 aircraft carriers. This scheme did have some distinct advantages over the new construction LPHs, including far greater endurance (*i.e.*, 35,000 miles at 18 knots versus 10,000 miles at 20 knots) and a far shorter production time (*i.e.*, 24 months versus 34 months).⁷⁵¹ By March 1957, a new compromise program of new construction and conversion had been agreed upon by the Standing Committee, Shipbuilding and Conversion, for fiscal years 1960 through 1964, as outlined below.⁷⁵²

Standing Committee, Shipbuilding and Conversion (March 1957)					
Ship Type	FY60	FY61	FY62	FY63	FY64
AGC (NC)	-	1	-	-	1
LPD (NC)	1	2	1	2	2
LPH (NC)	1	2	2	1	-
LPH (CONV)	1	1	-	-	-
LSD (NC)	2	2	-	2	2
LST (NC)	None until completion of feasibility study by BuShips.				

At the same time, the Committee arrived at some particularly noteworthy conclusions due to their potential effects on the overall development of amphibious warfare in the United States.

Two significant trends appeared to be evident among the committee members and may develop further: a. There appears to be a growing recognition that naval warfare does not necessarily center around the fast carrier task force and the extensive use of high yield nuclear weapons. Situations short of general war and peripheral warfare were noted and related to the effective development of shipbuilding and conversion program. b. Stemming from the foregoing was a recognition of the fact that supporting and amphibious warfare type ships are essential and cannot be further delayed without serious consequences.⁷⁵³

⁷⁴⁹ ___, Aide Memoire for the CMC Discussion with Admiral Burke, CNO, n.d. (RG 127: RRPPA&AO, Box 6, File 27, Tab 23; NARA).
⁷⁵⁰ CMC, Ser 004B1156 to CNO, 1/24/56; and CMC, Ser 004A4956 to CNO, 1/24/56 (RG 127: RRPPA&AO, Box 6, File 27, Tab 23; NARA).
⁷⁵¹ CNO, Ser 0023P03 to CMC, 4/14/56 (RG 127: RRPPA&AO, Box 6, File 27, Tab 23; NARA).
⁷⁵² DC/S, Memorandum to C/S, 3/15/57 (RG 127: RRPPA&AO, Box 6, File 27, Tab 30; NARA). ‘NC’ stands for New Construction; ‘CONV’ stands for Conversion.
⁷⁵³ DC/S, Memorandum, 1.

Within a few months of this proclamation, a solution to the problem of repeatedly delayed new construction LPHs was proposed, ‘utilizing *Essex*-class CVSs (ASW support aircraft carrier) as interim LPHs since some carriers of this type were scheduled for retirement’. Although no action was taken for a number of months, following the successful employment of two CVSs and one CVA in LANTPHIBEX 1-58 in early 1958 to land an entire RLT, the CMC finally accepted the idea. As a result, three CVSs were—after short conversions—re-designated as LPHs: the USS *Boxer* (CVS-21) as LPH-4 in January 1959; the USS *Princeton* (CVS-37) as LPH-5 in March 1959; and, finally, the USS *Valley Forge* (CVS-45) as LPH-8 in July 1961. As a result, the CVE-105 conversions were subsequently cancelled.⁷⁵⁴

Finally, less than two months after the USS *Valley Forge* had been officially re-designated, the first of seven new *Iwo Jima*-class LPHs was commissioned on 26 August 1961.⁷⁵⁵ The central advantage of the new LPH was that it had been ‘designed particularly to combat load, transport, and land a Marine BLT of up to 2,000 personnel with an embarked Marine transport helicopter squadron’.⁷⁵⁶ Five additional LPHs were commissioned between 1962 and 1968 (and the sixth in 1970).⁷⁵⁷

Rounding out the amphibious shipping procurement was the newly-designed Raleigh-class LPD as well as a number of smaller landing craft types. The former was the most complimentary to the aforementioned LPH and had an operating capacity for approximately 1,000 troops, a number of landing craft and up to six helicopters. Five of these vessels were commissioned between August 1962 and June 1965.⁷⁵⁸ Of the largest landing craft, a total of 36 newer LCU-type vessels were delivered between 1960 and 1968, with a cargo capacity of up to 180 tons. 271 copies of the 30-ton capacity LCM(6) Model 2 vessels were procured, beginning in 1960 (9) and ending in 1967 (122). Similarly, 266 LCVPs were also produced by 1967, as were a relatively large number of support craft. The latter included two versions of the LCPL, the Mark-

⁷⁵⁴ Rawlins/Sambito, 87-89.

⁷⁵⁵ ‘Dictionary of American Naval Fighting Ships’ (DANFS) at <http://www.history.navy.mil/danfs/index.html>.

⁷⁵⁶ Rawlins/Sambito, 88.

⁷⁵⁷ See http://hazegray.org/navhist/carriers/us_assau.htm.

⁷⁵⁸ DANFS at <http://www.history.navy.mil/danfs/index.html>.

4 and the Mark-8, of which a total of 427 were constructed between 1957 and 1967, although only a few of these were actually fitted out with any significant armament.⁷⁵⁹

Naval Training and Exercises

Naval Indoctrination and Training

At the same time that the procurement of helicopters and amphibious shipping was underway, practical training efforts to refine and improve doctrine and techniques, not to mention also maintain a seaborne ‘force-in-readiness’, continued. This followed the evolution of defence policy and strategy away from ‘global war’ and toward ‘limited’ and ‘peripheral’ combat around the Eurasian littoral. Somewhat ironically, whilst the Naval Service essentially achieved a level of true *amphibious* capability by the early 1960s (by maintaining a number of standing amphibious forces afloat around the world), it would also continue striving towards reaching a true *expeditionary* capability in the mid-1960s.

From a purely conceptual standpoint, this shift in training was first exemplified by a change in the types of ‘Advanced Base Problems’ that were offered at the Marine Corps Schools (MCS). For instance, in 1955 and 1956, Operation DRAGON, ‘an operation against China’, was delivered where particular emphasis was placed on the use of air support to maximise (strategic) surprise. Operation VIPER, an operation set for Cambodia in 1962, was then offered between 1959 and 1961, whilst Advance Base Problem XV—also known as Amphibious Warfare Study XV—‘depicted a hypothetical operation taking place in the Karachi-Tatta—Hyderabad, Pakistan area during 1963’. More than 100 demonstrations of this latter Problem, which included the use of helicopters for troop and supply transport, were made between 1959 and 1961. The last presentation prior to the Vietnam War was Operation CORMORANT, planning for which began in 1961. Interestingly, this consisted of an operation in the Da Nang area of Vietnam between

⁷⁵⁹ Miller, Richard T., (Capt., USN), ‘Fighting Boats of the United States’ in Frank Uhlig, Jr., (ed.), *Naval Review*, 1968 (Annapolis, MD: NIP, 1968; second printing March 1969), 316-319.

1963 and 1965, the exact location where the 9th Marine Expeditionary Brigade (MEB) would land in the latter year.⁷⁶⁰

By the time that Operation CORMORANT had come into being, a similar shift away from ‘global war’ scenarios in Europe toward ‘limited war’ situations around the world was also demonstrated by the types of exercises being held. One of the highlights of 1957, for example, was Exercise DEEP WATER, which aimed ‘to test the feasibility of employing forces from SACEUR’s Strategic Reserve in the Southern Region of Europe under total war conditions’. The amphibious force was provided by a provisional Marine Air-Ground Task Force (MAGTF) of RLT/MAG size (which was supposed to simulate a reinforced Division/Wing size Task Force) that was to link up with ‘II Turkish Corps, First Turkish Army’.⁷⁶¹

Although generally successful, two items of significance were raised with regard to amphibious/expeditionary development. The first concerned the fact that the employment of American amphibious doctrine had apparently proved so successful that it was recommended that it ‘serve as a model for the development of NATO amphibious doctrine and that it be used for the conduct of NATO amphibious operations and incorporated into appropriate directives’.⁷⁶² This was quite an ambitious suggestion considering the high level of *disagreement* amongst the armed forces of the United States. The second point involved the provision for ‘the immediate relief and withdrawal of the Marine Air-Ground Task Force after seizure of the Force Beachhead’. According to the Army, this was an inefficient use of valuable resources. It was much more efficient and effective to have regular formations—albeit specially trained—to land with their heavier equipment so that they could initiate and sustain the land campaign without interruption. Indeed, this same attitude had been taken by the British in the late 1940s although their approach had begun to shift somewhat by the mid-1950s, due to changes in the strategic environment.

⁷⁶⁰ Francis J. Kelly (Maj., USMC), ‘Advance Base Problems’, *MCG*, 51:11 (11/67), 47-49.

⁷⁶¹ CG, HQ, FMFLant, Ser A16-7/3 to [CG, FMFLant], 4/22/57 (RG 127: RG&AU, Box 21, File 2; NARA).

⁷⁶² CG, HQ, 4th Prov. MAGTF, Ser A16-7/3 to Cmdr., Naval Striking and Support Forces, Southern Europe, 10/26/57, 6; and Cmdr., Naval Striking and Support Forces Southern Europe, Ser 01357 to CINC, Allied Forces, Southern Europe, 11/14/57 (RG 127: RG&AU, Box 21, File 2; NARA), 4-5.

Exercise DEEP WATER was one of the few exercises larger than a Battalion Landing Team (BLT) to have been completed by FMFLANT units in the 1950s.⁷⁶³ This was primarily due to the shortage in amphibious shipping, which was one of the main concerns resulting from consecutive LANTPHIBEXs conducted in 1960 and 1961 in the Caribbean.⁷⁶⁴ Although the latter of these did finally involve landing three BLTs of the 4th MEB, the ‘shipping limitations’ did not allow the full potential of the exercise to be realised.⁷⁶⁵ This complaint was repeated only a few months later following another ‘Major Exercise’ called AXLE GREASE, which was also held in the Caribbean. Indeed, in this case, it was even noted that ‘casualty reports of various exercises show the need for an effective modernization or replacement program’.⁷⁶⁶

By 1961, despite all of these apparent difficulties, a milestone of sorts had been reached. The United States Naval Service had, in fact, established three standing amphibious formations that were truly *amphibious* in nature, meaning that they were almost exclusively naval in character. This was opposed to *expeditionary*-type forces, which were ground (or air-ground) formations that were specifically formed to operate overseas but which required an intermediate seaborne (or airborne) movement as well as a possible amphibious (or airborne) assault to get ashore. The first and oldest example entailed the so-called ‘Mediterranean Battalions’, which had been deployed in the Mediterranean since January 1948. Aside from two short gaps in 1950-1951 and 1955-1956, this deployment continued unbroken and proved its worth during the 1958 Lebanon crisis even without a vertical assault capability.⁷⁶⁷ The second was the relatively new FMF formation that had been established in the Caribbean in the wake of the 1959 Communist revolution in Cuba. While ‘officially described as a routine amphibious training unit’, this formation had ‘a balanced air-ground structure capable of vertical assault’ and was ‘sometimes

⁷⁶³ [ComAmphForLant], Ser N33/0412 to CINCLANT, 8/14/61 (RG 127: RG&AU, Box 18, File 4, Part 1; NARA), Enclosure 1 (page 7).

⁷⁶⁴ CG, FMFLant, Ser 03D11461 to CMC, 5/61; and CG, 2d MarDiv, Ser 03C9661 to CMC, 4/3/61 (RG 127: RG&AU, Box 18, File 4, Part 1; NARA).

⁷⁶⁵ CG, HQ, 4th MEB, Ser 03-61 to Commander, AmForLant, 3/31/61 (RG 127: RG&AU, Box 18, File 4, Part 1; NARA).

⁷⁶⁶ CG, HQ, 4th MEB, Ser 03A17361 to CMC, 6/22/61 (RG 127: RG&AU, Box 18, File 5, Part 1; NARA), 2.

⁷⁶⁷ [HQMC], ‘Mediterranean Battalions, 1948-1950; 1951-1955; 1956-Present’, 1/4/61 (RG 127: VHQMCD, Box 2, [File d], [Encl. 0]; NARA).

ashore, sometimes afloat'.⁷⁶⁸ The last was a similarly-established unit in the western Pacific that had originated from a request by the Commander of Seventh Fleet 'that a Marine BLT be maintained afloat on a permanent basis' due to various crises that had culminated in the Chinese Communist bombardment of the Chinese Nationalist islands of Quemoy and Matsu. As a result, 'TG 76.5 (SPECLANFORWESPAC)' was activated on 4 August 1960.⁷⁶⁹

Taken together, these formations represented the essence of a truly *amphibious* naval (or perhaps maritime) power, that is, the ability to launch rapid, if limited, attacks from the sea either to help seize, maintain or exploit 'command of the sea' or to assist in the outcome of events on land. Even so, these were not examples of true *expeditionary* power that were capable of extended sustainment ashore due to the inherent limitations of such a small standing/floating force even if it was a fully-integrated combined arms formation.

This specifically *amphibious* potential was recognised at the time by none other than the famous British strategist Captain B. H. Liddell Hart although he did so by ultimately overstating the *expeditionary* potential of the US Marine Corps. Nevertheless, his comments proved extremely poignant when viewed as a model for both amphibious and expeditionary warfare development. 'The US Marine Corps is a three-in-one Service in embryo. It has gained so much experience in combining land, sea and air action that it forms a nucleus and a pattern for further development. Logically it should be the basis for further progress in integration'.⁷⁷⁰

Later Exercises and 'Strategic Mobility'

Although an *amphibious* milestone had been reached by the Naval Service by 1961, continued shortages of significant amphibious shipping effectively precluded this capability from expanding considerably during peacetime. The one exception came during the Cuban missile crisis in October 1962 when the Naval Service was able to amass the largest collection of

⁷⁶⁸ [HQMC], 'Cuban Crisis, October 1959 – Present', 1/5/61 (RG 127: VHQMCD, Box 2, [File d], [Encl. 9]; NARA), 1; and Buse, H. W., Jr., (BG, USMC), lecture presentation, 'A Force in Readiness', 12/4/61 (RG 127: RRMOP&O, Box 22, File 11; NARA), 21.

⁷⁶⁹ [HQMC], 'Pacific Battalions, August 1960 – Present', 1/4/61 (RG 127: VHQMCD, Box 2, [File d], [Encl. 10]; NARA); and [L. C. Hudson, (BGEN, USMC)], 'Manuscript for Air War College Presentation on "Capabilities and Employment of the US Marine Corps – 1 March 1961"', 3/1/61 (RG 127: QS/VCMCD/VKI, Box 1, [File b]; NARA), 9.

⁷⁷⁰ B. H. Liddell Hart (Capt., BA), 'Marines and Strategy', *MCG*, 44:7 (7/60), 17.

amphibious shipping since the Second World War, which included a total of 1 AGC, 3 APDs, 10 LSTs, 11 APAs, 12 AKAs, 15 LSDs, and 4 LPHs. The corresponding naval landing forces amounted to about one and one-third reinforced divisions although this required the 5th MEB to transit through the Panama Canal from the Pacific. Even then, this amphibious force was overshadowed by the nearly four divisions of Army *expeditionary* forces—two airborne, one infantry and two-thirds of one armoured—which were prepared for employment. Although these landing forces were never employed offensively, an RLT-size landing exercise was conducted by the re-deploying amphibious forces, one of the largest in years, which involved three LPHs and the helicopter-lifting of two of the six BLTs.⁷⁷¹

With new, modern amphibious shipping slowly entering service in the early 1960s, it appeared that the Naval Service would be able to achieve some sort of true, if limited, *expeditionary* capability as demonstrated in two major exercises.⁷⁷² The first of these, STEEL PIKE I, took place in late 1964 and was the third ‘strategic mobility exercise’ in a series sponsored by the Joint Chiefs of Staff. This exercise was supposed to provide ‘an exercise and test of the general war plan 201’ (for Europe) as well as ‘a test of the Marine Expeditionary Force portion of the 316 Plan by the conduct of a division landing in the Huelva area’ of Spain.⁷⁷³ In the words of the senior staff members and commanding officers of II Marine Expeditionary Force (MEF), who had participated in the operation, because the past years had been overwhelmingly characterised by ‘limited...small scale operational deployments’, it was finally time to break off the ‘long love affair with single BLT operations’.⁷⁷⁴

From a specific *expeditionary* point of view, however, the results were mixed. The US Naval Service had, in fact, landed an MEF across the expanse of the Atlantic Ocean in an enterprise reminiscent of the World War II ‘invasion’ of North Africa—Operation TORCH.

⁷⁷¹ CINCLANT, ‘CINCLANT Historical Account of Cuban Crisis – 1963 (U)’, 4/29/63 (RG 127: RRPAUSMCR&HS, Box 11, File 8, Parts 1 & 2; NARA), 65-66, 141-151.

⁷⁷² See Alexander/Bartlett, 40-44.

⁷⁷³ CG, FMFLANT, ‘Strategic Mobility Exercise for Marine Division-Wing Team in Eastern Atlantic for fiscal year 1965; recommendations for (S)’, 1/9/64 (RG 127: U&OC, Box 135, File 2; NARA), Enclosure (1), 8-9.

⁷⁷⁴ Hammond, J. W., (Maj., USMC), ed., ‘STEEL PIKE I’, MCG, 49:1 (1/65), 48; CG, FMFLANT Ser 003A00864 to CINCLANT, 1/9/64 (RG 127: U&OC, Box 135, File 2; NARA).

However, there were still considerable doubts about this apparent expeditionary capability, particularly in two areas of previous concern. The first involved the ‘logistics capability’ of the entire force, which had already been deemed as deficient due to the need of having to employ a ‘reincarnated shore party battalion’ that had initially been eliminated by the FMF reorganisation of 1957-58. Although questions also arose as to the ‘engineer capability’, the main concern once again returned to the ‘adequacy of amphibious shipping’. As a matter of fact, ‘[s]hipping limitations dictated leaving behind some organic motor transport, engineer equipment, part of the Force Service Regiment, all major replacement end items, the ground equipment essential to the helicopter group for shore operations, and some LVTs’.⁷⁷⁵

Finally, there were also a number of ‘tactical questions’ that revealed weaknesses in what were otherwise considered to be Marine Corps’ strengths in amphibious warfare. By far the most significant was the overall lack of fire support, which was simply considered to have been ‘woefully small’. Particularly notable was the lack of carrier-based air support—again, a usual *forte* of the Marine Corps—although at least the landing of the administrative elements of a Marine Air Group was deemed ‘a success’. Nevertheless, despite these shortcomings, the outstanding ‘advantages of the multi-decks’, which consisted of ‘three LPH and two LPD decks’, were ultimately confirmed, which appeared to validate the validity of the amphibious operation (and amphibious ‘vertical envelopment’) as a ‘method of strategic mobility’.⁷⁷⁶

The second of the large-scale strategic mobility exercises was SILVER LANCE (PACFLEX 1-65) which took place in early 1965. According to public accounts, it was the largest ‘war game staged by US armed forces since WWII’, involving 60 ships as well as ‘20,000 sailors and 25,000 Marines’.⁷⁷⁷ More specifically, it consisted of a ‘short-of-war situation’ and ended ‘with the amphibious landing and maneuver ashore of an Expeditionary Corps’. Also significant was the considerable training in ‘advisory and assistance roles’, apparently in

⁷⁷⁵ Hammond, 49-50; CAF, AtlFlt, Ser N12/0877 to CINCLANT, 12/23/64 (RG 127: U&OC, Box 135, File 3; NARA); and CMC Observer Team, ‘Exercise Steel Pike I’, n.d. (RG 127: U&OC, Box 22, File 19; NARA), Section I.

⁷⁷⁶ Hammond, 49, 51; ‘Exercise Steel Pike I’, Section III.

⁷⁷⁷ —, ‘Silver Lance Ends; Mission Accomplished’, *MCG*, 49:4 (4/65), 5.

preparation for Vietnam, as this had been almost completely lacking in Marine Corps training for many years.⁷⁷⁸

Probably the most noteworthy observation to be made about SILVER LANCE was the decision to employ the FMF at a Corps level, as this represented the largest formation possible for the USMC, something the US Army considered to be only medium-sized. However, although most of the training goals were deemed to have been met successfully, problems continued to afflict what seemed to be the weakest aspect of the Naval Service's apparent *expeditionary* capability—logistics. Whilst the lack of amphibious shipping was (again) noted immediately, more prominent this time was the apparent need for extra logistics training—in the form of a 'logistics exercise (LOGEX)'—to follow 'every MEF and MEC exercise in order to exercise properly the Force and Corps level service and support agencies'.⁷⁷⁹

(Joint) Development of 'Joint Amphibious Operations' (or *Expeditionary Warfare*)

The Evolution of (Joint) Doctrine for Amphibious Operations (DAO)

Following the failed attempt to formulate joint amphibious doctrine through the Joint Amphibious Board (JAB), the Navy and Marine Corps convened a 'Navy-Marine Corps Ad Hoc Panel' in July 1957 to review a draft of NWP 22, *Doctrine for Amphibious Operations (DAO)*, for use as future joint amphibious doctrine.⁷⁸⁰ After nearly a year of revisions, an updated draft, titled 'Advance Change 5 to NWP 22/LFM 00 (Tentative)', was approved by the CNO and CMC, which they regarded 'as suitable for use in any amphibious operation'. As such, copies were sent to the 'the other Services' for their consideration.⁷⁸¹

After nearly two years of inaction, progress in negotiations with the Chief of Staff of the Army was finally made and, in mid-June 1960, the Naval Service confirmed that it was 'in

⁷⁷⁸ AC/S (G-3), Memorandum to C/S, 6/10/65 (RG 127: U&OC, Box 154, File 7, Part 1; NARA); CG, FMFPAC, ltr to CMC, 4/15/65 (RG 127: U&OC, Box 154, File 7, Part 1; NARA), i-ii; and Millett, *Semper Fidelis*, Chapter 17.

⁷⁷⁹ CG, FMFPAC, 'SILVER LANCE', encl. (1), 1-2, 4, 6, 10-13.

⁷⁸⁰ CMC, Memorandum (Ser 03C15459) for the CNO, 6/19/59 (RG 127: RRPPA&AO, Box 6, File 27; NARA), 1. See also Boose, 332-335, for a brief assessment of this process.

⁷⁸¹ [MCS], Advance Change 5 to NWP 22/LFM 00 (Tentative), *Doctrine for Amphibious Operations (Tentative Draft)*, 1958, 6/1/58 (author's copy).

complete or substantial agreement with approximately 80% of the Army comments' on *DAO*.⁷⁸² Complete accord followed six months later,⁷⁸³ although disagreements with the Air Force persisted. Even after attempts were made to solve Air Force objections, which centred on issues of command organisation and the fact that *DAO* essentially stemmed from unilateral doctrine, the Air Force held firm by finally notifying the CNO and CMC in November 1961 that it could not 'concur with publication of the manual in its present form', for two reasons. The first echoed the old concerns of the Army with regard to the desired establishment of a 'joint task force' in cases where 'significant elements of Army and Air Force forces' were involved. The second concerned the perception that the current doctrine was a mix of 'joint doctrinal principles and unilateral Service tactics, techniques and procedures', which therefore required clarification by subsuming *DAO* to the joint principles enshrined in *Unified Action Armed Forces (UNAAF)*, the replacement document for *JAAF*.⁷⁸⁴

As a result, a joint Army/Navy/Marine Corps manual, FM 31-11/NWP 22(A)/LFM 01, *Doctrine for Amphibious Operations (DAO)*, was promulgated on 1 July 1962.⁷⁸⁵ Ironically, and despite the Air Force's objections as outlined above, this manual appeared to address these exact problem areas, at least to the satisfaction of the Army, which had objected to the same during the original process of formulating joint doctrine in the early 1950s. For example, although the issue of an interim 'joint task force' was not specifically mentioned, the manual's language appeared flexible enough to allow such an arrangement to take place, if required. As paragraph 005a stated:

The amphibious task force is organized as a subordinate command within the area command structure. Establishment of an intervening command between the amphibious task force and the area command may be required when the amphibious operation is one

⁷⁸² CNO/CMC, Joint Letter to C/S, USA, 6/13/60 (RG 127: RRDAWD, Box 6, File 20, Part 2, Tab 56; NARA), 1.

⁷⁸³ C/S, USA, Memorandum for CNO/CMC, 12/19/60 (RG 127: RRDAWD, Box 6, File 20, Part 2, Tab 58; NARA).

⁷⁸⁴ ___, 'Chronological Resume of Air Force Objections to the Doctrine for Amphibious Operations (DAO) (NWP22(1), LFM-01 and FM 31-11) with Attendant Rationale', n.d. (RG 127: RRDAWD, Box 5, File 17, Tab 6; NAR), 2-3; C/S, USAF, ltr to CNO/CMC, 11/27/61 (RG 127: RRDAWD, Box 6, File 20, Part 2, Tab 62; NARA), 1.

⁷⁸⁵ USA/USN/USMC, FM 31-11/NWP 22(A)/LFM 01, *Doctrine for Amphibious Operations*, 7/1/62 (Library; MCHC), III.

of several related operations and the area command structure is not suitable for direct control of all forces participating therein.⁷⁸⁶

Although this higher command arrangement would have applied to the Air Force as well, the latter still took issue with the lack of independent command over Air Force forces whilst these forces were a part of the ‘amphibious task force’. Somewhat ironically, this particular aspect was not even mentioned in the rejection letter to the CNO/CMC, and it was apparently not raised five years later when the Air Force finally approved a new version of the joint manual.

This officially occurred in 1967 when a revised *Doctrine for Amphibious Operations* (DAO) manual was officially promulgated by all of the military services on 1 August as FM 31-11/NWP 22(B)/AFM 2-53/LFM 01.⁷⁸⁷ Interestingly, only minor alterations appear to have been made to the 1962 edition, the most significant of which involved the aforementioned issue of command over Air Force forces simply by introducing the term ‘joint amphibious task force’. Although it appeared that DAO had thus been subsumed under the principles of UNAAF as the Air Force had wanted, it nevertheless placed the direction of Air Force forces, even when ‘the preponderance of tactical aviation is provided by the Air Force...under the joint amphibious task force commander’.⁷⁸⁸ Either way, according to one source, the main obstacle to final approval ultimately lay at the top echelon of the Air Force in the form of General Curtis E. LeMay, who first rejected the initial overtures in 1961; once he stepped down on 31 January 1965, the doctrine was approved and promulgated relatively quickly.⁷⁸⁹

Army Developments

More than a year prior to the publication of FM 31-11, the Army promulgated FM 31-12, *Army Forces in Amphibious Operations (The Army Landing Force)*.⁷⁹⁰ Although this document seemed to have originated indirectly from the failed efforts of the JAB, it actually stemmed from

⁷⁸⁶ FM 31-11/NWP 22(A)/LFM 01, XIII.

⁷⁸⁷ USA/USN/USAF/USMC, FM 31-11/NWP 22(B)/AFM 2-53/LFM 01, *Doctrine for Amphibious Operations*, 8/1/67 (author’s copy).

⁷⁸⁸ FM 31-11/NWP 22(B)/AFM 2-53/LFM 01, paragraph 226. Also cited by Boose, 335.

⁷⁸⁹ LtGen Snedeker (USMC), Memorandum to LtGen Greene (USMC), 3/29/62 (RG 127: RRMOT&O, Box 1, File 4, Part 2; NARA), 1.

⁷⁹⁰ DA, FM 31-12, *Army Forces in Amphibious Operations (The Army Landing Force)*, 3/28/61 (LB, MCRC). See also Boose, 335-336.

related correspondence between the Departments of the Army and Navy that culminated in May 1955 'tactical concept guidance paper', titled 'The Army Landing Force', written by AFF. According to this paper, the new 'concept...was based on the strategical and tactical mobility requirements of the Army in consonance with the Army mission to seize, occupy and defend land areas',⁷⁹¹ as outlined in the 1954 edition of FM 100-5. Reiterating the Army's long-standing view that '[a]n amphibious operation may precede a large scale land operations, in which case it becomes the amphibious phase of a joint amphibious operation', the concept outlined various tactical principles as well as specific 'combat and logistical support' and 'organisational structure' requirements, all of which were to be 'based on a capability of supporting an Army corps consisting of three (3) infantry divisions and two (2) armored divisions',⁷⁹² a force that was nearly twice the size of the entire Marine Corps.

By June 1956, the Department of the Army (DA) had approved the establishment of a new 'Engineer Amphibious Support Command' as well as its corresponding doctrine 'in principle',⁷⁹³ which, whilst appearing in draft form as FM 5-156 in 1958, was never published, although a related manual, FM 5-144, *Engineer Shore Assault Units*, appeared in October 1963.⁷⁹⁴ More significant was the instruction to 'rewrite FM 31-5', which still existed in its 1944 edition, and issue it as a new 60- series manual, titled 'The Army Landing Force (Amphibious)',⁷⁹⁵

This was ultimately accomplished on 28 March 1961, although in the form of FM 31-12.⁷⁹⁶ Of the various issues covered in this publication, the two most significant, due to the fact that they help distinguish between US Army and Naval Service expeditionary/amphibious thinking whilst also facilitating a comparison of the Army's conceptualisation with overall British thinking, were actually summarised in the 'FOREWORD'. The first concerned the

⁷⁹¹ HQ, CONARC, 'Chronology and Analysis of the Development of Joint Doctrine for Amphibious Operations', 7/1/58 (MHI Stacks: U261.C49; Library, AHEC), 4, 7.

⁷⁹² Enclosure to HQ, CONARC, ltr to Distr., 5/31/55 (MHI Stacks: U261.D62; Library, AHEC).

⁷⁹³ HQ, CONARC, ltr to Distr., 6/7/56 (MHI Stacks: U261.D62; Library, AHEC), 2.

⁷⁹⁴ See Boose, 336.

⁷⁹⁵ HQ, CONARC, 6/7/56, 2.

⁷⁹⁶ DA, FM 31-12, *Army Forces in Amphibious Operations (The Army Landing Force)* (Washington, DC: HQ, DA, 3/28/61). Also cited by Boose, 335-336.

broader *expeditionary* nature of the Army view towards (joint) amphibious operations, which stemmed from its emphasis on the overall ‘requirement for *strategic and tactical mobility*’. Along these lines, and similar to the British evolution from ‘combined operations’ to the ‘seaborne/airborne concept’ and subsequently to the ‘joint warfare’ concept (as will be seen), the manual specifically recognised the potential of ‘projecting Army assault forces ashore from a mobile sea base *in conjunction with assault by airborne forces*’.⁷⁹⁷ This idea, along with ‘Airmobility’, was also pursued in this manual’s sister text, FM 31-13, *Battle Group Landing Team (Amphibious)*, which was published in September 1961⁷⁹⁸ and was predicated on the Army’s newly organised ‘pentomic’ division that comprised a total of five ‘battle groups’, each between battalion and regiment size.⁷⁹⁹

The second, and closely related, aspect involved the overall classification of the operation, which effectively stemmed from its scope, not only practically but also conceptually. As the manual stated outright that a ‘typical amphibious attack’ by the Army would involve ‘a small field army or an independent corps of three to five assault divisions’, it was almost self-evident that a very broad approach towards amphibious landings had to be taken. As such, the manual reverted back to techniques used by the Army over the past 15 years in order to try to distinguish itself from the Naval Service. On the one hand was the manual’s return to the use of certain terms and definitions, most notably including ‘Invasion’ and ‘Seizure’. On the other was the continued stress on where amphibious landings stood in relation to land warfare. Although the manual admitted that the ‘amphibious operation is a complete operation within itself’, which seemed to reflect a significant concession to the Naval Service, it then asserted that it was still ‘usually one phase or part of a campaign of larger magnitude’ which, again, possibly included ‘integrated, small scale airborne operations’.⁸⁰⁰ As a result, and as the Army had argued since the late 1940s, ‘the timing, means, and plans used to accomplish *the mission of the amphibious task*

⁷⁹⁷ DA, FM 31-12, i. Emphasis added. See also paragraphs 2c, 6b, 8b, 9.

⁷⁹⁸ DA, FM 31-13, *Battle Group Landing Team (Amphibious)* (Washington, DC: HQ, DA, 9/29/61), para. 4b. Also referenced by Boose, 336.

⁷⁹⁹ Doughty, 17.

⁸⁰⁰ FM 31-12, paras. 9, 10. Also quoted by Boose, 336.

*force must contribute to the further objective and permit a smooth transition to subsequent consolidation and buildup essential to support of further land force operations ashore’.*⁸⁰¹

Aside from these primary publications, it is worth remarking not only how much the topic of amphibious operations had spread amongst other Army Field Manuals (FMs) in general, but also how this subject was addressed at ever higher levels of force structure, which reflected the Army’s broader, *expeditionary* approach. Amongst the most significant were 100- series manuals, particularly the -5 volumes. Versions published in 1962 and 1968 continued to devote one chapter to ‘Amphibious Operations’ whilst also referring to these enterprises as being closely associated with ‘airborne’ operations, with the latter one also mentioning ‘airmobile’ operations.⁸⁰² Somewhat ironically, the -15 volumes, which specifically covered ‘Larger Units’, did not specifically address ‘amphibious operations’ at all, even conceding that the ‘Navy and Marine Corps have primary interest and responsibility in amphibious operations and land operations incident to the prosecution of a naval campaign’.⁸⁰³

Most other FMs only devoted a single section to amphibious enterprises versus a whole chapter. Within the 7- (‘Infantry’) series, for example, whilst the -20 (‘Battalion’) volumes barely mentioned amphibious warfare, the -30 (‘Regiment’) ones did, which again seemed to demonstrate the Army’s focus on larger-scale (expeditionary) endeavours.⁸⁰⁴ Similar attention to amphibious operations was also demonstrated, for example, in the 17- (‘Armor’) series, not only in the generic -1 volumes but also in the -30 ones, many of which also incorporated subsequent

⁸⁰¹ FM 31-12, para. 12c. Emphasis added.

⁸⁰² See DA, FM 100-5, *Field Service Regulations, Operations* (Washington, DC: HQ, DA, 2/19/62), Chapter 8; DA, FM 100-5, *Operations of Army Forces in the Field* (Washington, DC: HQ, DA, 9/6/68), Chapter 9, especially para. 9-2.

⁸⁰³ DA, FM 100-15, *Field Service Regulations, Larger Units* (Washington, DC: HQ, DA, 12/12/63), para. 5-11; DA, FM 100-15, *Larger Units, Theater Army-Corps* (Washington, DC: HQ, DA, 12/27/68), para. 6-11.

⁸⁰⁴ See DA, FM 7-20, *Infantry, Airborne Infantry, and Mechanized Infantry Battalions* (Washington, DC: HQ, DA, 1/16/62); DA, FM 7-20, *The Infantry Battalions* (Washington, DC: HQ, DA, 12/8/69); DA, FM 7-30, *Infantry, Airborne, and Mechanized Division Brigades* (Washington, DC: HQ, DA, 1/17/62), Chapter 10, Section IV; DA, FM 7-30, *Infantry, Airborne, and Mechanized Division Brigades* (Washington, DC: HQ, DA, 5/19/65), Chapter 7, Section IV; and DA, FM 7-30, *The Infantry Brigades* (Washington, DC: HQ, DA, 3/28/69), Chapter 8, Section IV.

sections on ‘Shore-to-shore movements’.⁸⁰⁵ This held true for the final important 61- (‘Division’) series, at least until the 1968 edition, where the latter topic was removed.⁸⁰⁶

Amphibious/Expeditionary Warfare in Vietnam

Despite the apparent compromises reached to secure the promulgation of (joint) amphibious warfare doctrine, the actual practice of amphibious warfare in operational situations, particularly during the Vietnam War, seemed to return almost completely to a monopolistic, *naval* affair. With the presence of a ‘permanent’ (*i.e.*, floating) Amphibious Ready Group/Special Landing Force (ARG/SLF) in the western Pacific as early as 1960, and the fact that it had already participated in a contingency-type operation in Thailand beginning in May 1962,⁸⁰⁷ the Naval Service was poised to take advantage of its amphibious ‘force-in-readiness’ role. Indeed, between March 1965 and the beginning of 1969, ‘more than 50 amphibious operations’ were conducted.⁸⁰⁸

Dominating 1965 was a series of five DAGGER THRUST raids which, ironically, had always been the specialty of the Royal Marine Commandos and not the US Marine Corps’ FMFs. Nevertheless, the geography of Vietnam presented undeniable opportunities for exploitation. In addition, General Westmoreland, the head of Military Assistance Command, Vietnam (MACV), was also interested in exploiting this truly amphibious force although a number of problems served to complicate their employment. The first was the fear within naval circles that once control over this force was relinquished, that it would never be regained.⁸⁰⁹ More concrete was the concern that the ARG/SLF was the Pacific Fleet commander’s only strategic reserve and therefore had to be ready to perform operations anywhere in the western Pacific at a moment’s

⁸⁰⁵ DA, FM 17-1, *Armor Operations—Small Units* (Washington, DC: HQ, DA, 8/23/57), Chapter 11, Section IX; DA, FM 17-1, *Armor Operations* (Washington, DC: HQ, DA, 6/20/63), Chapter 12, Section XI; DA, FM 17-1, *Armor Operations* (Washington, DC: HQ, DA, 10/14/66), Chapter 12, Section XI; DA, FM 17-30, *The Armored Division Brigade* (Washington, DC: HQ, DA, 11/28/61), Chapter 6, Section II; DA, FM 17-30, *The Armored Brigade* (Washington, DC: HQ, DA, 9/12/69), Chapter 10, Section II.

⁸⁰⁶ DA, FM 61-100, *The Division* (Washington, DC: HQ, DA, 1/4/62), Chapter 9, Sections II, III; DA, FM 61-100, *The Division* (Washington, DC: HQ, DA, 6/25/65), Chapter 9, Sections II, III; DA, FM 61-100, *The Division* (Washington, DC: HQ, DA, 11/15/68), Chapter 12, Section II.

⁸⁰⁷ Whitlow, Robert H., (Capt., USMCR), *US Marines in Vietnam: The Advisory and Combat Assistance Era, 1954-1964* (Washington, DC: HQMC, 1977), Chapter 7.

⁸⁰⁸ Hilgartner, P. L. (Lt. Col., USMC), ‘AMPHIBIOUS DOCTRINE in VIETNAM’, *MCG*, 53:1 (1/69), 29.

⁸⁰⁹ Schulimson, Jack, and Charles M. Johnson (Maj., USMC), *US Marine in Vietnam: The Landing and the Buildup, 1965* (Washington, DC: HQMC, 1978), Chapter 13.

notice. A similarly command-related controversy erupted over whether and how long the amphibious forces should come under the senior land commander who was commanding the entire operation. This concern was raised by the unduly long control exerted over the force during Operation DOUBLE EAGLE in early 1966.⁸¹⁰

While some of these controversies continued, a number of operations were still conducted, and with success. Most notable in the rest of 1966 and early 1967 were ‘the broader type of amphibious operation, codenamed Deckhouse’. These were specifically ‘designed to complement allied operations against enemy units’. The first took place in June 1966 ‘in support of the US 1st Cavalry Division’s operation Nathan Hale’, which ultimately evolved into a ‘nine-battalion operation’. This seemed to be the biggest of the series as the other DECKHOUSE variations amounted to not much more than single BLT landings.⁸¹¹ Indeed, this seemed to be characteristic of the overall amphibious contribution to the war in the first few years.

With few exceptions, SLF operations, to that point, had little resemblance to classical amphibious warfare. For the most part, Marine amphibious operations in Vietnam were either administrative landings, exploitations of an already existing battle situations, or amphibious raids. Marine landing forces were not assaulting hostile shores; they were landing where large US and allied ground forces and air forces were already present.⁸¹²

Despite this limited performance, two SLFs had been formed by 1968—Alpha and Bravo—each of which consisted of about 2,000 men built around an infantry battalion, a helicopter squadron and various supporting arms, all of which remained afloat in amphibious shipping. As a matter of fact, both SLFs would participate in the largest amphibious operation of the Vietnam War in 1969—called Operation Bold Mariner. However, this enterprise would essentially represent the highlight of amphibious warfare in this conflict. ‘For 1969, there would be 14 SLF operations as compared to 13 in 1968, and 25 in 1967. By the end of 1969, the SLFs had become a moot question for operations in South Vietnam. With the reduction of forces in Vietnam, the SLF could only be committed with the specific permission of the JCS’.⁸¹³

⁸¹⁰ Schulimson, Jack, *US Marines in Vietnam: An Expanding War, 1966* (Washington, DC: HQMC, 1982), 297-298.

⁸¹¹ Schulimson, *Expanding*, 304-305.

⁸¹² Schulimson, *Expanding*, 306.

⁸¹³ Schulimson, Jack, and Leonard A. Blasiol (Lt. Col., USMC), Charles R. Smith, and David A. Dawson (Capt., USMC), *US Marines in Vietnam: The Defining Year, 1968* (Washington, DC: HQMC, 1997), 631-642.

CONCLUSION

Despite the fact that the US Naval Service was the almost exclusive practitioner of amphibious landings during the early years of the Vietnam conflict, there were a few notable indications that showed why naval predominance over American amphibious/expeditionary development was not as clear-cut as has generally been accepted. On the one hand was the US Army's continued production of unilateral amphibious doctrine throughout the 1960s, which reflected its broader *expeditionary* perspective. On the other hand was the official adoption of joint amphibious doctrine by all the services in 1967, which indicated that a convergence of the parallel courses of amphibious and expeditionary warfare development *within* the US had occurred. It was this latter (joint) course of development, in turn, that most closely mirrored the overall British direction of amphibious/expeditionary warfare development in the 1960s. Even though the Royal Navy would ultimately reorient its primary role towards conducting (amphibious) landing operations, thereby reflecting the *amphibious* thinking—and, to a far lesser extent, capacity—of the US Navy and Marine Corps, it would still do so within the broader (and traditional) framework of 'combined operations'—eventually known as 'joint warfare'—which involved all three Services.

CHAPTER SIX: UNITED KINGDOM, 1957-68

OVERVIEW

It was during the 1957-1968 period that the most significant changes in British amphibious/expeditionary development occurred, although they did not alter its overall course. Most influential was a pivotal shift in the geo-strategic situation that allowed—if not propelled—the Royal Navy to change its own strategic priorities, as well as its corresponding force structure, to include (and eventually become predominated by) amphibious capabilities. Unlike in the late 1940s and early 1950s, when (offensive) amphibious capabilities were generally seen as being of lower priority by all the services, particularly by the Navy, the mid-1950s witnessed a significant shift in the geo-strategic situation from ‘general war’ and (limited) ‘cold war’ operations to what would eventually be referred to as ‘limited war’ scenarios. Ultimately, this translated into a broader need for what were then termed as ‘strategic mobility’⁸¹⁴—or *expeditionary*—capabilities, not just specifically *amphibious* ones.

Nevertheless, it was this particular alteration in strategic priorities that provided the Royal Navy with the initial (but primary) justification for increasingly supporting amphibious/expeditionary capabilities. Whilst this first involved the procurement of new specialised amphibious shipping for all types and elements of ground forces, it also featured the expansion of the Royal Marine Commandos, which effectively consolidated the ongoing shift away from their limited roles as (wartime) amphibious raiders and a (peacetime) mobile Imperial Police force (or ‘Fire Brigade’) to that of seaborne light infantry. As a result, even though the Commandos successfully consolidated their expanded roles, numbers and reputation, they still fell short of conforming very closely to the USMC Fleet Marine Force (FMF).

By the time that the RN’s strategic and organisational re-orientation had gained momentum in the early 1960s, its amphibious capabilities had been incorporated into a new ‘joint warfare’ concept and matching organisational/institutional structure. This evolved from the

⁸¹⁴ See Brown, *Strategic Mobility*.

so-called ‘seaborne/airborne/land operations’ concept, which had been developed by AWHQ, and was based on the integrated employment of complementary seaborne and airborne strategic mobility capabilities to effect reinforcement- and intervention-type operations over great distances. Exactly just such an enterprise was conducted to reinforce Kuwait from a direct Iraqi threat in the summer of 1961.

Although this ‘joint warfare’ concept has been described as being ‘innovative’, specifically because of ‘the emphasis that it placed on joint operations’,⁸¹⁵ it seems apparent that this notion was perhaps similar, at least conceptually, to the original concept of ‘combined operations’ that emerged during the inter-war years, albeit perhaps applicable to altogether different strategic scenarios and therefore in overall scope.⁸¹⁶ This was most evident in the area of doctrine as reflected by the new *Manual of Joint Warfare* of the 1960s (and 1970s) on the one hand, and the various editions of the *Manual of Combined Operations* of the 1920s and 1930s on the other.

STRATEGIC ASPECTS

The evolution of British defence policy and strategy between 1957 and 1968 can generally be divided into two five-year phases, as marked by the respective 1957 and 1962 defence statements. The first phase (1957-1961) essentially consolidated the mid-1950s transition from the all-encompassing threat of ‘global war’ to the smaller-scale (but longer-term and more dispersed) dangers of the ‘cold war’. This was propelled by reductions in military spending, which not only forced an increasing reliance on the nuclear (and thermo-nuclear) deterrent but also ushered in a return to all-regular forces. It was during this phase that, whilst calls for strategically mobile forces continued in general, the Royal Navy in particular—under the prescient leadership of Lord Louis Mountbatten as First Sea Lord (FSL)—underwent a fundamental strategic and organisational reorientation away from traditional ‘sea control’ toward conventional ‘power projection’ or ‘amphibious’ capabilities.

⁸¹⁵ See Speller, ‘Seaborne/Airborne’, 80.

⁸¹⁶ See, for example, Clifford, *Amphibious*, and Massam.

The second phase (1962-1968) was generally characterised by an ongoing attempt to balance increasingly limited defence resources (due to continued financial stringencies) with an undiminished spectrum of global commitments. As a result, a more concerted effort was made to provide for all types of strategically mobile conventional forces to deal with 'cold war' as well as 'limited war' contingencies. Additionally, in order to maximise these (still limited) forces' effectiveness and efficiency, a parallel attempt was made to integrate them, not only operationally but also conceptually, from the 'bottom, up' as well as from the 'top, down'. Almost all of these endeavours generally benefitted the Royal Navy (and, by extension, the Royal Marines), which had made improving its amphibious capabilities its first (if not sole) priority by 1962, despite difficulties brought about by inter-service rivalries and institutional resistance to change. Ultimately, however, this overall balance could not be maintained and, as a result of another set of defence reviews that began in 1965, it was decided three years later that British defence commitments would have to be withdrawn from 'East of Suez' altogether.

Defence Policy, 1957-1961

Following the 'Suez Crisis', the so-called 'Sandys White Paper', which was published in April 1957 and titled *DEFENCE: Outline of Future Policy*, announced a seminal change in British defence policy that effectively represented the 'culmination of attempts since 1952 to reduce Britain's defence expenditure'.⁸¹⁷ Indeed, due to yet another episode of economic hardship and various 'scientific advances', mainly the 'far more powerful hydrogen or megaton bomb...[and] the evolution of rocket weapons of all kinds', the paper concluded that 'it is only now that the future picture is becoming sufficiently clear to enable a comprehensive reshaping of policy to be undertaken with any degree of confidence'.⁸¹⁸

⁸¹⁷ Dockrill, Michael, *British Defence Since 1945* (Oxford: Basil Blackwell Ltd., 1988), 65.

⁸¹⁸ MD, Cmnd. 124, *Defence: Outline of Future Policy* (London: HMSO, 4.57), 1.

From a purely geo-strategic perspective, however, this white paper only consolidated a process that had evolved, at least publicly, since 1954.⁸¹⁹ As a result, it summarily asserted that

Britain's armed forces must be capable of performing two main tasks:-
to play their part with the forces of Allied countries in deterring and resisting aggression; [and]
to defend British colonies and protected territories against local attack, and undertake limited operations in overseas emergencies.⁸²⁰

Whilst then referring to 'Collective Defence' and the 'Nuclear Deterrent' as the main sources of British security, the document also emphasised two areas of focus that would characterise the evolution of overall British defence policy and force structure through the mid-1960s. The first concerned a 'Central Reserve...in the British Isles', which was to be paired with 'the means of rapid mobility' provided by 'RAF Transport Command'. The other area centred on 'Sea Power' which, even though the document had previously noted that the 'rôle of naval forces in total war [was] somewhat uncertain', involved 'the Royal Navy, together with the Royal Marines, provid[ing] another effective means of bringing power rapidly to bear in peacetime emergencies and limited hostilities'. At the same time, it was also pointed out that 'the role of the aircraft carrier, which is in effect a mobile air station, becomes increasingly significant'. Finally, the report announced the Government's intention, due to the new defence plan's 'reduced demands on manpower and its emphasis on highly trained mobile forces', to put 'the Services on to an all-regular basis'.⁸²¹

Emphasis on these two main areas of concentration was repeated in the 1958 *REPORT ON DEFENCE*, which also proclaimed that 'through the balancing fears of mutual annihilation', there was no reason why this strategic situation could not continue 'almost indefinitely'.⁸²² As a result, the 1959 white paper basically provided only a 'progress' report of sorts, notably focusing on 'Modernisation of Fleet' first, 'Re-equipment of Army' second, and 'Air Support and

⁸¹⁹ See MD, Cmd. 9075, *Statement on Defence, 1954* (London: HMSO, 2.54), 1-7; MD, Cmd. 9391, *Statement on Defence, 1955* (London: HMSO, 2.55), 1-9; and MD, Cmd. 9691, *Statement on Defence, 1956* (London: HMSO, 2/56), 1-8.

⁸²⁰ MD, Cmnd. 124, 2. Partially quoted in Dockrill, 67.

⁸²¹ Cmd. 124, 5-6. Partially quoted in Grove, *Vanguard*, 203.

⁸²² MD, Cmnd. 363, *REPORT ON DEFENCE: Britain's Contribution to Peace and Security* (London: HMSO, 2.58).

Mobility' last.⁸²³ By the time that the 1960 statement was promulgated, there was still 'no major change' in the course of this new policy.⁸²⁴ However, it should be noted that, whilst modernisation efforts with regard to 'Land', 'Sea' and 'Air' forces were briefly summarised, separate emphasis was now being placed specifically on 'Mobility', 'so that reinforcements can be brought to trouble spots before the trouble has time to spread into a major conflict'. Included under this heading were, again, the evolving 'strategic' and 'tactical transport' assets of 'RAF Transport Command' as well as a new 'commando carrier', which 'will normally be deployed east of Suez'.⁸²⁵

The Royal Navy and Strategic Mobility

As mentioned above, it was during this first phase that the Royal Navy underwent a fundamental strategic and organisational reorientation that enabled it, in the face of being overshadowed—even completely—by the focus on 'global (nuclear) war' (and the RAF and strategic bombing),⁸²⁶ to become an increasingly central part of British defence policy from 1957 onwards. The origins of this change stemmed from the initiation of yet another defence review in 1955. As a result, the new First Sea Lord, Lord Louis Mountbatten (of World War II COHQ and SEAC fame), who believed that the Royal Navy had not yet reached the 'limits of administrative economy' due to its "dangerously bloated condition" with its massive infrastructures of shore establishments', also initiated a review of the entire naval establishment.⁸²⁷ The idea for doing so seemed to germinate as early as 1950,⁸²⁸ although the fact that the Navy had "never streamlined itself after the war" ultimately drove Mountbatten to pursue 'urgent and drastic pruning'.⁸²⁹ As Mountbatten noted at the time, the review's 'purpose was to examine the structure and supporting organisation of the Navy up to 1965 – to go into the teeth to tail relationship and to

⁸²³ MD, Cmnd. 662, *Progress of the Five-Year Defence Plan* (London: HMSO, 2.59), 1-3.

⁸²⁴ MD, Cmnd. 952, *REPORT ON DEFENCE, 1960* (London: HMSO, 2.60).

⁸²⁵ Cmnd. 952, 8-10.

⁸²⁶ See, especially, Ziegler, Philip, *Mountbatten*, Perennial Library reprint (New York, NY: Harper & Row, 1986), 522, 525-526.

⁸²⁷ Grove, *Vanguard*, 174-175.

⁸²⁸ Ziegler, 496.

⁸²⁹ Hough, Richard, *Mountbatten* (New York, NY: Random House, 1981), 249-250. For support of this agenda see, for example, CINC, ME Station, ltr to FSL, 12.10.55 (MB1/I370; BA).

recommend the necessary cuts where they were found to be justified and feasible'.⁸³⁰ What resulted, as announced in the 1956 *Naval Estimates*, was an ongoing process of streamlining based on a 'general emphasis...on maintaining the frontline fleet as cheaply and efficiently as possible, at the price of mobilization potential', which was 'a significant shift from the priorities of the previous decade'.⁸³¹

In having to defend this so-called 'frontline fleet' from continued pressures to cut defence costs, the Admiralty set about providing a number of justifications. The most significant of these, not only for its 'carrier force in particular' but also for 'the navy in general', was the role of the Royal Navy in scenarios ranging from "'peacekeeping" missions' to 'limited/brushfire war' operations, particularly east of Suez.⁸³² Whilst the Navy's positive performance in the latter variety during the Suez Crisis seemed to provide 'evidence' supporting the Admiralty's argument, more fundamental was the appreciation within certain quarters of the Navy itself, even *prior* to Suez, of the continued value of the 'Senior Service' in all sorts of future situations. This was particularly with regard to a new 'carrier with a Commando embarked with its transport as well as troop-carrying helicopters', which could be employed as a 'fire extinguisher...before calling in the "Fire Brigade"' (as a Brigade of the divisional 'strategic reserve' in the UK was called).⁸³³

Moreover, the effective 'creation of a Middle East "air barrier" against British flights' (due 'directly' to the debacle at Suez) appeared to provide an inherent limitation to the effectiveness of British air power east of Suez. This did not seem to be the case for long as the RAF had apparently crafted what would eventually be referred to as the 'Island Stance' strategy, 'as a means of circumventing the Middle East air barrier, [although] it soon acquired wider overtones in self-conscious opposition to the navy's carrier plans'. Whilst an intense period of inter-Service rivalry erupted, the Navy seemed to maintain the upper hand, at least with regard to

⁸³⁰ ___, 'Statement Recorded by the First Sea Lord for the Way Ahead Presentation in Fairlead', [1957] (MB1/I578; BA). For more on the origins of this review, see various correspondence (MB1/I370; BA).

⁸³¹ See Grove, *Vanguard*, 175. 1956 *Naval Estimates* cited as 'Cmnd. 9697, paras. 23-27'.

⁸³² Grove, *Vanguard*, 199-200.

⁸³³ See VCNS, ltr to [FSL], 12.2.55; and Director of Plans, ltr to VCNS, FSL, 10.9.56 (MB1/I370; MB1/I260; BA).

procuring amphibious capabilities, although its newly-designed aircraft carrier, the CVA-01, was ultimately cancelled in 1966.⁸³⁴

Whilst the 1957 defence statement, as discussed above, effectively pronounced the initial success of all of these aforementioned ‘review’ efforts, the Navy was forced into similar defensive action yet again, this time in preparation to promote the specific value and efficacy of amphibious capabilities, including the Royal Marine Commandos. This began with the so-called ‘Autumn Naval Rethink’, which was ‘endorsed’ by the Chiefs of Staff, and ended with the introduction of a new ‘converted carrier, equipped to accommodate a Marine Commando force and capable of operating helicopters for either the troop-carrying or anti-submarine role’, as stated in the 1958 defence statement.⁸³⁵ This agreement was apparently secured through the personal effort of Lord Mountbatten, who convinced the Minister of Defence, Duncan Sandys, of the value of this new concept during a visit to his personal estate at Broadlands.⁸³⁶

Ultimately, the extent to which amphibious (and related) capabilities had been accepted—and prioritised—by the Royal Navy in particular, and the British defence establishment in general, was specifically exemplified in the ‘1962 Naval Estimates’. This was simply because, as one authoritative analysis concluded, ‘amphibious warfare was now the acknowledged role of the Royal Navy. There was *no* mention of other kinds of operations’.⁸³⁷ In the final analysis, however, it is worth noting that the traditional term ‘combined operations’ (instead of ‘amphibious warfare’) was used to describe the ‘role of the Navy’ in the same 1962 Estimates, specifically at the beginning of an oft-cited paragraph (which was even quoted in the aforementioned ‘authoritative analysis’). To wit:

In peace-time the ships of the Royal Navy are stationed all over the world. But when danger threatens they can be quickly assembled to take their place with the Army and Royal Air Force in *combined operations* to meet the threat.⁸³⁸

⁸³⁴ Grove, *Vanguard*, 201, 256-257, 276-277. See also Speller, ‘Role’, 243-264; and ‘The Royal Navy...’ in Kennedy, 178-198.

⁸³⁵ Cmnd. 363, 8.

⁸³⁶ Grove, *Vanguard*, 210.

⁸³⁷ Grove, *Vanguard*, 253. Emphasis in original.

⁸³⁸ See First Lord of the Admiralty, Cmnd. No. 1629, *Explanatory Statement on the Navy Estimates 1962-63*, paragraph 2; reprinted in full in Thursfield, H. G. (RADM, RN), (ed.), *BRASSEY’S ANNUAL: The Armed Forces*

The use of such all-encompassing terminology, despite the fact that the '1962 Estimates' was a Royal Navy document and that the term 'amphibious warfare' had been in official use since 1951, indicated that British amphibious thinking was ultimately still focused on a broader, holistic capacity (and approach), whether described as 'strategic mobility', 'expeditionary operations', or 'joint warfare'. At the same time, although the Navy now viewed amphibious warfare as its predominant function—something of an evolution from the immediate post-war years—resource limitations meant that it was in no position to develop single service capabilities comparable to America's.

Defence Policy, 1962-1968

The second phase of British defence policy evolution, as mentioned above, attempted to balance increasingly limited defence resources with largely unaltered global commitments, whilst also building strategically mobile conventional forces and integrating them to maximise their effectiveness and efficiency. This policy was first described in the 1961 defence statement, which asserted 'that many of our most important responsibilities are not concerned with the direct deterrence of all out global war, but rather with the checking of small outbreaks which could grow into nuclear war by accident or design'. As a result, British defence policy 'must depend on its evident power of rapid and certain reaction against any form of attack' whilst protecting 'us, our allies and our friends against the whole spectrum of possible aggression and military threats...'. Using conventional forces, this was to be accomplished primarily by 'the establishment of local stockpiles,...the rapid air movement of troops and equipment, and by increased naval strength'.⁸³⁹

This sentiment was reiterated with more urgency in next year's statement which, as its title revealed, addressed *The Next Five Years* (and even beyond). As a situation had been reached where 'Governments can no longer choose to have either a full-scale conventional war or a

Year-Book, 1962 (London: William Clowes & Sons, Ltd., 1962), 292-314. Also quoted in Grove, *Vanguard*, 252, and Crowe, 236. Emphasis added.

⁸³⁹ MD, Cmnd. 1288, *REPORT ON DEFENCE, 1961* (London: HMSO, 2.61), 3-5.

limited war without risking the use of nuclear weapons', the document basically reaffirmed the solution outlined the previous year.

We must insure against the possible loss of fixed installations overseas by keeping men and heavy equipment afloat, and by increasing the air and sea portability of the Strategic Reserve.... Greater mobility by air and sea is the best way of fulfilling efficiently over the next five to ten years the requirements set out.... In short, we must maintain carefully balanced forces to deter every form of aggression and military threats [*sic*].⁸⁴⁰

Although first outlined to the public in these two defence statements, the era of what would become known as 'British Strategy in the Sixties' had one of its major sources from a 'Joint Study' that was produced by the JPS and promulgated by the COS on 5 July 1960.⁸⁴¹ This comprehensive paper ultimately analysed British 'military strategy....the tasks of the Services, and...the consequent force requirements during the coming decade'. In reaching the strategic conclusions that were outlined in the defence statements discussed above, the paper also outlined how Britain could fulfil its strategic obligations.

Whilst we have not yet been able to study in detail the many practical problems involved, it seems that the only course which can offer the means of achieving our aim is to develop progressively towards a strategy based on the maintenance of small seaborne forces with floating stockpiles, and on the rapid movement by air over long distances of land and air forces.⁸⁴²

In addition to the general force requirements outlined above, the 'Joint Study' also described the 'Need for an Assault Capability', in particular an 'airborne assault capability...in the Mediterranean/Near East area and a seaborne and airborne assault capability in the Persian Gulf area. No specific requirement [was] foreseen for either of these capabilities in the Far East'.⁸⁴³ More details on the 'seaborne force' were provided in an Appendix, which revealed a myriad of insights with regard to inherent differences between American and British amphibious development. For example, of subtle—yet not insignificant—importance was the terminology. This involved the actual term 'amphibious warfare', which the British viewed as being simply 'the transport by sea of land forces, who have had some special training, from a base to a foreign

⁸⁴⁰ MD, Cmnd. 1639, *STATEMENT ON DEFENCE, 1962: The Next Five Years* (London: HMSO, 2.62), 4-5.

⁸⁴¹ COS (60) 200, 5.7.60 (DEFE 13/299; NA).

⁸⁴² COS (60) 200, paras. 6, 108.

⁸⁴³ COS (60) 200, paras. 28, 191.

and possibly hostile shore, there to be landed across the beach ready to fight'. As a result, the British preferred to use the word 'seaborne' instead.⁸⁴⁴

More significant was the description of 'Use of the Sea by Land Forces', which seemed to forecast the development of what would become known as the 'seaborne/airborne' concept that eventually evolved into the concept of 'joint warfare'.

In the future there is likely to be an even greater premium on rapidity of intervention and the distances between land force bases and possible operational areas will increase. The strategic lift of a force by sea from a shore base, even in fast ships, will then be too slow; land forces will depend increasingly on strategic air transport to reach their operational area within an acceptable time scale....In these circumstances, use of the sea can be complementary to strategic air movement in three ways:

- (a) By holding small self-contained forces poised well forward where they will be available for rapid intervention.
- (b) By holding forward heavy land and air force equipment and stores that will be required early in an intervention but are either very expensive in air transport or not air-transportable.
- (c) In the follow-up phase by establishing a sea L of C and by moving armour.⁸⁴⁵

While the central premise of this idea was that it was inherently joint (*i.e.*, involving both 'seaborne' and 'airborne' forces), it is important to note that the 'seaborne forces' themselves were also depicted as being joint too. This applied first to 'commando carrier operations' where there was 'no reason to suppose that the infantry unit embarked would necessarily always be Royal Marines, nor that the ship would not at times also carry RAF helicopters to augment those organic to the carrier. Inter-Service flexibility should be the keynote...'.⁸⁴⁶ Secondly, this applied to other specialised vessels by which 'armour and artillery could be included in the seaborne force with or without the personnel. In the latter case, the personnel concerned could join the ships by air...'.⁸⁴⁷ This latter ship was referred to as the 'Seaborne Support Ship', two types of which were being considered at the time. The first, dubbed the 'Assault Ship', was a '20-knot ship with a capacity for 700 men, 15 tanks, 6 guns and 50 × 3-ton equivalents'. The second, called the 'New LST', was a '15-knot ship with a capacity for 350 men and 16 tanks'.⁸⁴⁸ Both of these types of ships would eventually be built and deployed. Two of the former type emerged as

⁸⁴⁴ COS (60) 200, Appendix C, paras. 3-4.

⁸⁴⁵ COS (60) 200, Appendix C, paras. 3-4.

⁸⁴⁶ COS (60) 200, Appendix C, para. 11.

⁸⁴⁷ COS (60) 200, Appendix C, para. 13.

⁸⁴⁸ COS (60) 200, Appendix C, para. 17.

the assault ships *HMS Fearless* and *HMS Intrepid* in 1965 and 1966, respectively, and a total of six larger versions of the latter type—called Landing Ships Logistic (LSL)—entered service between 1966 and 1968, although these ships were at first operated by a commercial line like Army troop ships. Only later would they pass to the Royal Fleet Auxiliary, the organisation that operated Navy supply ships.

ORGANISATIONAL/INSTITUTIONAL ASPECTS

From the AWHQ Establishment to a ‘Joint Warfare’ Organisation

Following on from the Chief of Amphibious Warfare’s (CAW’s) annual report for 1956, which announced the required staff reductions as a result of the defence review process of 1953–54,⁸⁴⁹ CAW was able to report by the end of 1957 that his ‘Headquarters...[was] working adequately, although it takes rather longer to get results’.⁸⁵⁰ This appeared to be evident after a request by the COS in early 1958 ‘to review the whole concept of Amphibious Operations’⁸⁵¹ took nearly two full years to complete. Nevertheless, this extensive effort culminated in a policy letter from CAW to the new Chief of the Defence Staff (CDS), now Lord Mountbatten, on 19 November 1959, which essentially introduced the concept of so-called ‘seaborne/airborne operations’.

In the present air age, *amphibious warfare must be assessed as a means of strategic mobility in relation to air transport and air assault operations*. In this comparison, the air offers the advantage of speed; the sea those of heavy load capacity, economy, independence of bases, and stand-off or hover capability.⁸⁵²

In parallel with this concept, which will be discussed in more detail below, CAW also noted that ‘[s]ome degree of overall co-ordination, earmarking of units, and the establishment of common doctrine for planning and training [was] necessary’.⁸⁵³

⁸⁴⁹ COS (56) 404, 2.

⁸⁵⁰ COS (57) 265, 5.12.57 (DEFE 2/2067, folio 40; NA), 2.

⁸⁵¹ JP (58) 23 (D) Revised T of R (A Section), 8.4.58, 1; and JP (58) 5 (Final), 13.2.58, 2 (DEFE 6/49; NA).

⁸⁵² COS (59) 312, 7.12.59 (DEFE 5/98; NA), 2. Emphasis added.

⁸⁵³ COS (59) 312, 4.

The 'Joint Warfare Committee' (JWC) and 'Joint Warfare Staff' (JWS)

An assessment to determine exactly what was required to implement such 'overall co-ordination' was not accomplished by the JPS (and approved by the COS) until early June 1961.⁸⁵⁴ In essence, this evaluation identified four major weaknesses in the 'present organisation'. Its first conclusion seemed to hearken back to one of the major concerns of the 'RAW Committee' of 1944 with regard to 'combined operations', in that 'no single higher authority exists in Whitehall, below the Chiefs of Staff Committee, specifically responsible for formulating and directing joint Service policy for limited war to be implemented through all three Service Ministries'. Second, the existing 'Joint Organizations', which included the School of Land/Air Warfare (SLAW) and the Joint Services Amphibious Warfare Centre (JSAWC), effectively precluded the study of study seaborne/airborne/land operations as a joint concept because of the separate consideration of sealift and airlift. Third, the central weakness of the 'Single Service Organizations and Training' was the lack of 'a world-wide inter-Service concept of seaborne/airborne/land warfare to which [the Services] can work'. In apparent contrast to the American (naval) approach, it was emphasised here that '[e]ven the experience of the Royal Navy with units active in all three elements...cannot fully expose all the problems of operating a force drawn from all three Services. It is therefore *no substitute for a fully integrated inter-Service approach*'. Finally, the report noted one last serious 'handicap': the 'lack of a common joint service concept [that] has resulted in the separate development of equipment for airborne and for seaborne operations'.⁸⁵⁵

Subsequently, the JPS prepared another comprehensive analysis to recommend improvements, which was approved by the COS on 4 January 1962.⁸⁵⁶ This appraisal, which dealt primarily with the 'Proposed System for Higher Direction', first rejected 'the formation of a separate joint headquarters organisation' like AWHQ during peacetime, noting that it 'could not be justified' and that 'it was more appropriate for executive power to be exercised by Single

⁸⁵⁴ COS (61) 180, 8.6.61 (DEFE 5/114; NA).

⁸⁵⁵ COS (61) 180, 2-7.

⁸⁵⁶ COS (62) 12, 4.1.62 (DEFE 5/123; NA).

Service Ministries...'. A more 'practical solution [lay] in the formation of a new joint Service organisation in Whitehall consisting of a committee, composed of senior representatives of the Service Ministries and the Ministry of Defence but directly responsible to the Chiefs of Staff, served by a standing joint staff'. This 'committee'—dubbed the 'Joint Warfare Committee' (JWC)—was to absorb the responsibilities of the Land/Air Warfare Committee and AWHQ, 'both of which would cease to exist'. The 'staff', which was to be labelled the 'Joint Warfare Staff' (JWS), was to be headed by a 'Director', who was also to be a 'full member' of the JWC.⁸⁵⁷ Finally, it was suggested that a working party be established to make certain recommendations, the most urgent of which included 'the composition and establishment of sub-committees' and the 'composition and organisation of the permanent staff'.⁸⁵⁸

As recommended, the newly-formed JWC addressed some of these issues at its first meeting, held on 17 January 1963, by appointing a 'Joint Warfare Working Party' (JWWP) to come up with specific 'recommendations'.⁸⁵⁹ A final version of this group's report,⁸⁶⁰ which was approved by the COS on 20 February,⁸⁶¹ recommended the establishment of three sub-committees: an 'Offensive Support Sub-Committee' (OSSC), an 'Air Transport Support Sub-Committee' (ATSSC), and an 'Amphibious Warfare Sub-Committee' (AWSC).⁸⁶² It is interesting to note the elemental way in which responsibilities amongst these entities were allocated. This was particularly the case for AWSC which, for instance, was *not* given responsibility for 'naval gunfire support' (under OSSC) and 'all joint aspects of air transport support', including helicopters (under ATSSC),⁸⁶³ as would have almost certainly been expected from an American naval point of view as these areas were considered to be intrinsic characteristics of *amphibious* warfare.

⁸⁵⁷ It is interesting to note that the first Director was the former CAW, Major General R. D. Houghton, RM.

⁸⁵⁸ COS (62) 12, 2-5.

⁸⁵⁹ COS (JWC)(62) 1st Meeting, 17.1.62 (DEFE 11/370: folio 1; NA). See also DCDS, ltr to ACNS, DMO, ACAS, 12.1.62 (DEFE 11/367: folio 1; NA).

⁸⁶⁰ COS (JWC)(62) 1, 15.2.62; JWS/5/2/2/62, 2.2.62 (DEFE 11/367, folios 5, 3; NA).

⁸⁶¹ ___, 'Extract from COS (62) 12th Meeting held on 20 Feb. 1962', 20.2.62; see also COS (JWC)(62) 2nd Meeting, 7.2.62 (DEFE 11/367, folio 6; DEFE 11/370, folio 3; NA).

⁸⁶² COS (62) 84, 28.2.62, (DEFE 5/124; DEFE 11/367, folio 10; NA), 2.

⁸⁶³ See COS (62) 84, Appendices A, B, C.

A number of items related to the composition of the JWS are also worth highlighting as many of them revealed apparently inherent similarities between the new JWC/JWS organisation and AWHQ. For example, not only did the required number of JWS staff match the existing staff level at AWHQ at the time, but it was also recommended to retain the ‘present other ranks staff at AWHQ...to serve the Joint Warfare Staff’. Furthermore, it was also noted that AWHQ’s existing ‘accommodation...[was] suitable for the Joint Warfare Staff’.⁸⁶⁴ All of these apparently coincidental similarities were reaffirmed, if only ceremoniously, by the subsequent approval by the JWS of the use of the ‘original Combined Operations Badge, with modified wording’ by ‘all Joint Warfare Establishments’.⁸⁶⁵

The ‘Joint Warfare Establishment’ (JWE)

The JWWP next considered two other significant items that had been recommended by the JPS report of 4 January, namely ‘the training and development organisation’ and the ‘best procedures for formulating doctrines and techniques’.⁸⁶⁶ After yet another extensive assessment was prepared by mid-July 1962,⁸⁶⁷ a revised version was ultimately approved by the COS on 30 October, which authorised ‘the formation of a Joint Warfare Establishment’ by 1 April 1963. The report’s central conclusion bears quoting in full.

Defence strategy is founded on the unity of purpose of the three Services. For this to be translated into effective action demands common doctrines, standardised procedures, compatible equipments and a high degree of inter-Service understanding at all levels. For these reasons, we consider it to be important to *reject the view that land/air warfare and amphibious warfare are distinct studies to be pursued more or less in isolation*. We believe that *the two subjects should be viewed as complementary parts of the concept of seaborne/airborne/land operations* enunciated by the Chiefs of Staff; a concept which poses the problems of command, co-ordination, communications, and logistics in the most complicated form. This concept of *Joint Warfare* we define as:-

“The employment of sea and/or air forces in concert with land forces.”⁸⁶⁸

‘With the adoption of this concept’, the report continued, ‘it [was] no longer satisfactory to have separate schools for land/air warfare and amphibious warfare’. As a result, the ‘ideal

⁸⁶⁴ COS (62) 84, 3-5. See also JWS 2/29/3/62, 29.3.62 (DEFE 11/367, no folio; NA).

⁸⁶⁵ See PPO/P (62) 37, 4.7.62 (DEFE 11/367, folio 22; NA). See also COS (JWC) 7th Meeting/63, 8.5.63; and COS (JWC) 9th Meeting/63, 10.7.63, for the decision to provide the ‘Amphibious Warfare Badge’ to ‘all Joint Warfare Establishments’ (DEFE 11/370, folio 12, 14; NA).

⁸⁶⁶ COS (JWC)(62) 3rd Meeting, 6.4.62 (DEFE 11/370: folio 4; NA)

⁸⁶⁷ JWS 5/17/7/62, 17.7.62 (DEFE 11/367, folio 24; NA); and COS (JWC)(62) 5th Meeting, 27.8.62 (DEFE 11/370, folio 10; NA).

⁸⁶⁸ COS (62) 426, 31.10.62 (DEFE 5/131; NA), 1. Emphasis added.

solution...[was] to create a single establishment, at one location, which would provide for both training and development in all Joint Warfare matters'.⁸⁶⁹ Although the move of SLAW to Poole (the location of JSAWC) was 'ruled out by the lack of accommodation', the 'move of the Amphibious Warfare School to Old Sarum' (the location of SLAW) was considered to be 'possible'. Consequently, the amalgamation of the two entities at Old Sarum to form 'a Joint Warfare Establishment' (JWE) was advocated 'with a target date of 1st April, 1963'.⁸⁷⁰

The JWE was to be organised into a 'Headquarters' and two 'Wings'. A 'Training Wing' was to consist of an 'Offensive Support Section', an 'Air Transport Support Section', and an 'Amphibious Warfare Section'. This 'Wing' would generally be responsible for all training aspects, including 'academic training' that included the following subject areas, which bore a very strong resemblance to those topics accorded to the ISTDC back in 1938:

- (a) Offensive and transport support, both seas and air, of grounds forces established in the field....
- (b) Airborne assault and associated air support.
- (c) Seaborne assault and associated air and surface support.
- (d) Air-landing operations and associated air support.
- (e) Landings from the sea, over beaches or through a port.
- (f) Logistic support, whether air-dropped, air-landed, over a beach or through a port.⁸⁷¹

The 'Training Wing' would also be responsible for disseminating 'up-to-date Joint Warfare doctrine, procedures and techniques by means of...Study Periods,...presentations and visits', teaching various courses—including a new 'Joint Warfare Course', and providing specialised training. A second 'Tactical Development Wing' was to have primary responsibility for 'the development of joint-Service tactical doctrines, procedures and equipment'.⁸⁷² Although it is unclear whether the original 'target date of 1st April, 1963' was adhered to, the new JWE was reported to be up and running by May.⁸⁷³

⁸⁶⁹ COS (62) 426, 1.

⁸⁷⁰ COS (62) 426, 1-2.

⁸⁷¹ COS (62) 426, 3.

⁸⁷² COS (62) 426, 3-4, 8.

⁸⁷³ See COS (JWC) 7th Meeting/63, 8.5.63; see also COS (JWC) 6th Meeting/63, 5.4.63 (DEFE 11/370, folios 12, 11; NA); COS 93/63 (issued 1st March, 1963), 4.4.63 (DEFE 5/136; DEFE 11/367, folio 45; NA), 1-2, 4; and COS (62) 482 (issued 18.12.62), 11.1.63 (DEFE 5/132; NA).

Higher Level Defence Re-organisation

Similar efforts to promote the ‘unity of purpose of the three Services’ also occurred at the highest levels of defence organisation; in effect, from the ‘top, down’. This was evidenced by the creation of a truly unified Ministry of Defence in 1964. Whilst perhaps not having a direct impact on British amphibious/expeditionary development *per se*, it did ultimately reflect the conceptual and practical advances being made, not only at the organisational/institutional level (as discussed above) but also at the tactical/operational level (as will be discussed below).

This higher level process was achieved in three areas. This first stemmed from the 1958 promulgation of the *Central Organisation for Defence* which, amongst other things, officially confirmed the post of Chief of the Defence Staff (CDS), similar to the US Chairman of the JCS, ‘designed to emphasise the importance of the closest inter-Service co-operation’.⁸⁷⁴ This was significant because its second occupant, Lord Louis Mountbatten, was to play a decisive role in this unification process. Mountbatten’s rationale stemmed from his World War II experiences, not only as head of COHQ, where he became ‘a firm believer in inter-Service co-operation’, but also subsequently as the supreme commander of SEAC.⁸⁷⁵ Indeed, according to his official biographer, by the time Mountbatten became CDS (in 1959), he had apparently become known as ‘a partisan of some degree of unification between [sic] the three Services for twenty years or more’, even to the point of being a ‘notorious...partisan of centralisation’.⁸⁷⁶

The second area, and one in which Mountbatten had a direct hand, concerned the ‘unification of the command of forces in the field [which] was, in terms both of tactics and organisation, an almost essential preliminary to any fundamental change in the Centre;...’.⁸⁷⁷ Although a ‘Commander-in-Chief, British Forces Arabian Peninsula, had operated since April, 1958’ at a headquarters at Aden,⁸⁷⁸ it was first recognised publicly as a ‘unified command’ in

⁸⁷⁴ PM, Cmnd. 476, *Central Organisation for Defence* (London: HMSO, 7.58), 3, 5.

⁸⁷⁵ Terraine, John, *The Life and Times of Lord Mountbatten* (New York, NY: Hold, Rinehart and Winston, 1980), 88. See also Hough, 259; and Ziegler, 180-181.

⁸⁷⁶ Ziegler, 578, 532.

⁸⁷⁷ Howard, Michael, *The Central Organisation of Defence* (London: RUSI, 1970), 14.

⁸⁷⁸ Johnson, Franklyn A., *Defence by Ministry: The British Ministry of Defence, 1944-1974* (New York, NY: Holmes & Meier Publishers, Inc., 1980), 76.

1959 and, along with the newly-formed 'Near East Command', was renamed 'Middle East Command' in 1961, with headquarters in Cyprus and Aden, respectively.⁸⁷⁹ In 1962, it was decided that a third unified command would be established in the 'Far East',⁸⁸⁰ notably where Mountbatten had tried (and failed) to create just such an organisation in 1946.⁸⁸¹

The third and last area involved the establishment of a unified Ministry of Defence. This essentially represented the culmination of a drive towards inter-Service co-operation that had blossomed with the 1962 announcement of both the organisational/institutional changes—in the form of a new 'Joint Service Staff'—as discussed above, and the tactical/operational changes—in the form of so-called 'joint Service task forces using the air and the sea to transport men and equipment and to support operations conducted ashore'—as will be discussed in more detail below.⁸⁸² At the same time, the Statement also outlined the ongoing objectives of these efforts.

Increasing stress will be laid on interchangeability of functions and mutual support and assistance between the three Services, so that we get the best value out of our Service manpower as a whole.... The purpose is not to revolutionise the organisation of the forces but rather to secure greater co-operation and economy.⁸⁸³

With the focus now turned toward fostering this 'outlook...at every level from the top to the bottom of our defence forces and organisation',⁸⁸⁴ as demonstrated by the official announcement of 'decisions...to strengthen the central organisation for defence',⁸⁸⁵ by 1964, the Government was able to boast, not completely without reason, 'that our three fighting Services have broken the conventional moulds and transformed themselves into a single swift-moving, flexible, almost infinitely adaptable instrument of defence policy'.⁸⁸⁶

One final by-product of this higher re-organisation process is worth noting, as it illustrated the degree to which the British defence establishment had effectively accepted that amphibious warfare was an inherent part of joint warfare. This involved a re-organisation within

⁸⁷⁹ Cmnd. 662, 4; and Cmnd. 1288, 5.

⁸⁸⁰ Cmnd. 1639, 15.

⁸⁸¹ Ziegler, 584; Howard, 14; Johnson, *Ministry*, 74.

⁸⁸² Cmnd. 1639, 10.

⁸⁸³ Cmnd. 1639, 14.

⁸⁸⁴ MD, Cmnd. 1936, *STATEMENT ON DEFENCE, 1963, Including Memoranda to Accompany the Navy, Army and Air Estimates, 1963-64* (London: HMSO, 2.63), 5.

⁸⁸⁵ MOD, Cmnd. 2097, *Central Organisation for Defence* (London: HMSO, 7.63), 1.

⁸⁸⁶ MD, Cmnd. 2270, *STATEMENT ON DEFENCE, 1964* (London: HMSO, 2.64), 7.

the Naval Staff itself. Due to the ‘changes in [the] central Committee structure’, an internal Admiralty memorandum noted a year after the re-organisation had transpired, it had become evident that ‘the division between the two Directorates’ responsible for Joint and Amphibious Warfare was ‘illogical and that Joint Warfare and Amphibious Warfare should be a unified responsibility’.⁸⁸⁷ As a result, it was agreed to consolidate these responsibilities into a ‘unified Naval Staff responsibility’. This was based on the simple rationale that the ‘dividing line between Joint and Amphibious Warfare can never be clearly defined, and in fact, the one included the other’.⁸⁸⁸

TACTICAL/OPERATIONAL ASPECTS

By 1956, it will be remembered, the joint amphibious operation began to re-emerge as a focal point of British amphibious/expeditionary development, although its scope remained relatively limited to ‘a force of up to a brigade group’, according to CAW’s 1954 and 1958 directives.⁸⁸⁹ At the same time, CAW continued to be responsible for examining such wide-ranging fields as ‘the technique of maintenance or withdrawal...across beaches’, ‘embarking and disembarking cargoes by improvised means’, and even ‘major river crossings’. He was also responsible for ‘the joint Service problems of raiding operations’, related to which was advising ‘on the development of technique and...training policy for Commando Units, the Commando School, RM, [and] the Amphibious School, RM...’.⁸⁹⁰

Nevertheless, the attention to purely offensive enterprises appeared to gain momentum in the late 1950s, mainly through the introduction and development of the ‘Commando Carrier/Ship’ concept. Although this initially supported the primacy of the Royal Navy and Royal Marines, at least with regard to amphibious capabilities,⁸⁹¹ the re-evaluation of the amphibious assault and follow-up (or logistic) lift requirements, which resulted in the

⁸⁸⁷ Director, NTWP, memorandum to DCNS, 29.7.65 (DEFE 69/71; NA), 2.

⁸⁸⁸ 2nd PUS (RN), ‘Joint and Amphibious Warfare – Responsibility Within the Navy Department’, 26.11.65 (DEFE 69/71; NA), 1.

⁸⁸⁹ COS (54) 365, 2; COS (58) 293, 24.12.58 (DEFE 5/87; NA), 2.

⁸⁹⁰ COS (58) 293, 2-3.

⁸⁹¹ See, especially, Speller, *Role*, Epilogue; ‘Role’, Chapters 6-8; and his chapters in edited books, as discussed in the Introduction, 23.

procurement of these respective vessels in the 1960s, with the latter specifically for Army (and RAF) supporting arms and heavy equipment, actually reinforced the traditionally joint character of British concepts, approach and practice. Also significant was the permanent attachment of Royal Artillery (RA) batteries to RM Commandos whilst deployed (particularly afloat), making them inherently joint formations, not to mention finally the effort to study and implement the ‘interchangeability’ of commandos and Army battalions when operating from commando ships.⁸⁹²

Most important, however, was the introduction of the ‘seaborne/airborne/land operations’ concept in 1961. This subsequently evolved into the broader notion of ‘joint warfare’ into which ‘amphibious warfare’ was effectively subsumed, thus further reaffirming the traditional joint approach towards—and practice of—such endeavours by the British. In this particular regard, this development seemed to hearken back to the inter-war years (and even before) when so-called ‘combined operations’ (*i.e.*, with ‘combined’ meaning *joint*) had first been conceptualised.

The Evolution of (Joint) ‘Amphibious Operations’ (1956-59)

The ‘Commando Carrier Force’ Concept

The idea for a helicopter assault type ship actually preceded its first implementation at Suez in November 1956. This stemmed from an investigation into the future role, structure and organisation of the Royal Navy that was initiated in 1955 by the new First Sea Lord, Lord Louis Mountbatten, as discussed above. Approximately one year later, in July, a paper titled ‘The Future Role of the Navy’ was presented to the COS,⁸⁹³ which introduced a concept that would characterise—and eventually nearly dominate—the evolution of the Royal Navy for the next two decades.⁸⁹⁴

The paper called for ‘one Commando Carrier to carry a Royal Marine Commando with its transport and a squadron of troop-carrying helicopters’. This ship, in turn, was supposed to be

⁸⁹² See Introduction, 23, for Speller’s 2006 and 2008 articles.

⁸⁹³ COS (56) 280 (Revise), 25.7.56 (DEFE 5/70; NA).

⁸⁹⁴ See footnote 891.

part of a new 'Task Group, based on Singapore...capable of...bombardment and landing a self-supporting Royal Marine Commando or an equivalent number of troops'. The general purpose of the Group, which consisted also of a Light Fleet Carrier, four destroyers, and a Cruiser, was to provide reinforcements to 'existing naval forces' in the East Indies and the Far East for 'Cold War policing' and 'Limited War' scenarios.⁸⁹⁵

Although this paper accurately foreshadowed the evolution of British strategy and force structure in the late 1950s and even 1960s, and was visionary in scope, CAW only slowly moved forward on this concept. Whilst first noting the commissioning of the USS Thetis Bay 'into the first helicopter assault carrier...at the end of July, 1956', CAW concluded that, due to the 'recent emergency' (at Suez), there now existed an 'urgent need...[t]o develop the helicopter technique'.⁸⁹⁶ He reiterated this emphasis to the COS less than a week later, whilst addressing certain 'amphibious warfare problems' that had occurred during MUSKETEEER.⁸⁹⁷ However, it was not until September 1958 that concrete progress on the Commando Carrier force concept began, after the Admiralty promulgated an analysis outlining a proposed 'deployment' schedule, a corresponding 'redeployment' plan for the Commandos, and an articulation of the ship's strategic roles and capabilities. Interestingly, the Admiralty believed the primary role would only be for 'internal security and minor actions'. As a result, for 'Limited War' operations, the ship '*would only be committed in conjunction with other naval, land and air forces*', which meant that any such operation would have to be joint in character.⁸⁹⁸

This paper was considered by the COS on 14 October, 1958, where it was agreed that the 'logistic and administrative implications' of the Admiralty's proposals needed to be assessed.⁸⁹⁹ The resulting examination, approved by the COS on 9 February, 1959, generally reiterated the Carrier's capabilities and strategic roles, albeit in a bit more detail. Specific topics included additional personnel, various 'means of supply, repair and replacement of unit equipment,

⁸⁹⁵ COS (56) 280 (Revise), 3-4.

⁸⁹⁶ COS (56) 404, 4; Appendix "C".

⁸⁹⁷ COS (56) 412, 19.11.56 (DEFE 5/72; NA).

⁸⁹⁸ COS (58) 219, 18.9.58 (DEFE 5/85; NA). Emphasis added.

⁸⁹⁹ COS (59) 32, 9.2.59 (DEFE 5/88; NA), 2.

vehicles and spares', 'Accommodation', 'War Reserves', 'Other Facilities', and finally 'Training Facilities' in the 'United Kingdom', the 'Mediterranean', and 'East of Suez'.⁹⁰⁰

Outstanding about this arrangement was that almost all of these requirements had to be provided from Army resources, which accentuated what increasingly appeared to be the joint nature of the Commando Carrier concept itself. This was reinforced even more by the requirement for 'logistical support' by the Army for 'any major scale, or independent operations' at the brigade level. Although no such support was necessary for operations conducted by the 'Commando Carrier Force' on its own, it was estimated that up to '440 all ranks and 125 vehicles' would be required from Army resources for larger enterprises, ranging from such units as an 'MT Company' to a 'Postal Unit'.⁹⁰¹ However, as the War Office was not making any provision for such 'second line administrative units to support the Commando Brigade', it was ultimately concluded that the Commando Brigade could only be committed 'as part of a larger force for which logistic support, including administrative personnel, would have to be pre-planned'. In other words, '*Commandos could be employed independently only in minor and special operations...*'.⁹⁰² This starkly differentiated the Royal Marine Commandos from their USMC FMF counterparts in America as the latter could provide all of the aforementioned logistic elements solely through the US Navy, thus enabling them to be employed quite broadly in an *amphibious*—and, arguably, even *expeditionary*—role.

Although the Admiralty initially reported having difficulties implementing the aforementioned proposals,⁹⁰³ its efforts were complicated by calls for the movement of an armoured squadron, a Royal Marine Commando and the Amphibious Warfare Squadron south of the Suez Canal 'barrier'.⁹⁰⁴ The Admiralty responded with a paper on a proposed 'Joint Services Seaborne Force'. In the short term, such a force could be created (and based at Aden) by moving 'the operational element of the AW Squadron (i.e. 1 LSH(S), 2 LST(A)s and 2 LCT(8)s) South

⁹⁰⁰ COS (59) 32, 1-6.

⁹⁰¹ COS (59) 32, 7; Appendix "C", Part II.

⁹⁰² COS (59) 32, 7-8.

⁹⁰³ COS (59) 71, 24.3.59 (DEFE 5/90; NA).

⁹⁰⁴ COS (59) 137, 12.6.59 (DEFE 11/219, folio 185A; NA), 1.

of the Barrier' and adding to it a troopship, an MT ship, and two War Department (WD) LSTs. This force could either maintain a 'Battalion Group poised for a period of up to six weeks within 4 days' steaming of Kuwait' or transport two Battalions directly from Aden to Kuwait within '8 days', although the LCTs had to be located within the Persian Gulf in either case.⁹⁰⁵

By the end of 1959, it was evident that the approval and implementation of these actions, along with the scheduled commissioning of *HMS Bulwark* in January, 1960, would largely implement the 'Joint Services Seaborne Force' concept. However, this was ultimately only a temporary solution to a deeper and long-term problem that threatened to limit, if not paralyse, amphibious development in the United Kingdom for the foreseeable future. As summarised by the Chief of Amphibious Warfare in his annual progress report, dated 1 January, 1960, this 'small joint force...should, with the Commando Carrier, be a valuable asset, *although nothing can make up for the slow speed and obsolescence of its ships*'.⁹⁰⁶

Operational Requirements for Amphibious Lift

The 'obsolescence' of Great Britain's amphibious lift had been a concern of AWHQ since the Suez crisis.⁹⁰⁷ This anxiety gradually mounted until CAW finally declared in the first sentence of his 1958 annual report that the 'dominant problem of British amphibious warfare...during 1958...[was] and still is the future of our assault and logistic amphibious shipping'.⁹⁰⁸ Consequently, efforts in 1959 focused on determining the operational requirements for future amphibious lift with examinations being launched by AWHQ and other entities.⁹⁰⁹ By the end of that year, a plan had emerged that consisted of the following two elements:

- (a) An assault lift of two Commando Carriers and two Amphibious Assault Ships to be built by the Admiralty [and]
- (b) A follow-up lift of LST to be built under the supervision of the Ministry of Transport for the War Office.⁹¹⁰

⁹⁰⁵ COS (59) 137, 1-3.

⁹⁰⁶ COS (60) 1, 1.1.60 (DEFE 5/99; DEFE 2/2067, folio 44; NA), 2. Emphasis added.

⁹⁰⁷ COS (56) 412, 19.11.56 (DEFE 5/72; NA), 2.

⁹⁰⁸ COS (58) 282, 12.12.58 (DEFE 5/87; DEFE 2/2067, folio 42; NA), 1; and __, 'Extract from COS (59) 10th Meeting held on 5 Feb 1959', n.d. (DEFE 11/219, folio 160; NA), 4.

⁹⁰⁹ COS (57) 182, 7.8.57 (DEFE 5/77; NA).

⁹¹⁰ COS (60) 1, 1.

This plan, in fact, was already underway as HMS *Bulwark* was scheduled for commissioning as a Commando Carrier in January, 1960, and another light fleet carrier, HMS *Albion*, was identified for conversion into a second Commando carrier that ‘summer’.⁹¹¹ In addition, some advances had been made with regard to developing staff requirements and designs for the new Assault Ships and new (logistic) LSTs. Taken together, these measured accomplishments permitted CAW to state that ‘the present obsolescent ships [could] be replaced by 1965 provided that appropriate Budget action is taken...’.⁹¹²

Development of the two Amphibious Assault Ships had first emerged from an October, 1958, technical study conducted by the Admiralty (in consultation with AWHQ). This study looked at a number of different types of ships, including a new ‘LCT’, a ‘Bow loading LST’, a ‘Stern loading LST’, an ‘Amphibious Transport Dock’, as well as ‘Current and projected US amphibious ships and craft’. Although the two best options were deemed to be either the ‘Bow loading LST’ or a small version of the ‘Amphibious Transport Dock’, the fact that the latter had a maximum ocean-going speed of 23 knots seemed to make it a more attractive option since it could keep up with both the Commando Carrier as well as with the American LPHs.⁹¹³ At a COS meeting two weeks later, the Chiefs agreed that ‘[d]etailed design studies should be started forthwith on an Amphibious Transport Dock...’.⁹¹⁴

Reflecting the increasing strategic emphasis on strategic mobility, the Board of the Admiralty finally approved the ship’s design in March 1961,⁹¹⁵ and awarded a contract for the so-called ‘Landing Ship Assault’ [LSA] in December.⁹¹⁶ Although the two assault ships, HMS *Fearless* and HMS *Intrepid*, were not expected to come into service until 1966, their ultimate value revolved around providing fast and versatile vessels with a maximum carrying capacity for a myriad of items such as troops, tanks, and vehicles, as well as its own landing craft and

⁹¹¹ Wettern, 182.

⁹¹² COS (62) 47, 5.2.62 (DEFE 5/124; NA), 1.

⁹¹³ COS (58) 254, 13.11.58 (DEFE 5/86; NA), 8-9, Appendix “B”.

⁹¹⁴ ___, ‘Extract from COS (59) 32 Meeting held on 26 May 1959’, n.d. (DEFE 11/219, folio 183A; NA), 7.

⁹¹⁵ Speller, ‘Role’, 191.

⁹¹⁶ COS (62) 81, 21.2.62 (DEFE 5/124; DEFE 2/2067, folio 66; NA), 2, 9.

amphibians. Finally, each ship had command facilities available for a 'Naval/Amphibious Group/Brigade HQ' and included a 'joint Amphibious Beach Unit, consisting of Army and Royal Marine personnel' as part of its company.⁹¹⁷

There was also an emphasis on these ships providing a joint capability, which was reflected in the ships' roles and expected deployment. Indeed, four types of operational roles were outlined, consisting of: '(a) Seaborne Assault Role.... (b) Joint Seaborne/Airborne Landing.... (c) In support of an air transported force.... [and] (d) Logistic Role...'. To execute these various roles, Army and Royal Marine units and personnel had to be earmarked for training with new units being trained by the Amphibious Training Unit, Royal Marines, POOLE, before departure from the United Kingdom'.⁹¹⁸

With regard to deployment, it was expected that an 'Amphibious Group' would be formed east of Suez in 1966 which, in turn, would be 'normally...supported by an aircraft carrier, the necessary escorts, a replenishment group and the Army's logistic ships'.⁹¹⁹ These so-called 'logistic ships', in fact, evolved from a 1958 examination of 'the problem of replacing existing WD LST and LCT' that was related to the aforementioned 'technical study'.⁹²⁰ Different versions of these vessels were also addressed in CAW's March 1959 report as well as a follow-up analysis of May 1960.⁹²¹

Finally, in September 1962, a formal 'programme for the construction of logistic ships to replace the present WD LST Fleet' was approved by the Chiefs of Staff.⁹²² Indeed, due to their vastly 'improved characteristics' (relative to the old WD LSTs), the introduction of these new Landing Ship Logistic (LSL) into the Far East, Middle East and Near East, respectively, was therefore considered to be 'highly desirable', 'urgent', and 'desirable, though not essential'. In addition, it was considered that 'the early introduction of these craft generally, particularly east

⁹¹⁷ COS 109/64, 2.4.64 (DEFE 5/150; NA), 1.

⁹¹⁸ COS 109/64, 2.

⁹¹⁹ COS (62) 373, 12.9.62 (DEFE 5/130; NA), 2.

⁹²⁰ JP (58) 24 (Final), 7.

⁹²¹ COS (60) 151, 31.5.60 (DEFE 5/103; NA).

⁹²² COS (62) 373, i.

of Suez, is an important element in providing the flexibility and mobility required by our Strategy for the Sixties'. As a result of all of these factors, the COS ultimately concluded that the second and third ships should 'be ordered at latest by April 1963' and that '[i]t would be most economical to complete replacement of the existing fleet of WD LSTs by LSLs by 1966'.⁹²³ In the end, after the construction programme was accelerated,⁹²⁴ a total of six LSLs were launched, the first one, *Sir Lancelot*, in June 1963.⁹²⁵

From (Joint) 'Amphibious Operations' to 'Joint Warfare', 1959-1968

As discussed previously, the defence re-organisation of 1962-63 that resulted in the creation of the Joint Warfare Committee (JWC), Joint Warfare Staff (JWS), and Joint Warfare Establishment (JWE)—while also propelled by strategic factors—was mainly driven by developments at the tactical level. This revolved around the development of the idea of 'seaborne/airborne/land operations', which subsequently evolved into the broader concept of 'joint warfare'—into which amphibious warfare was subsumed. Far from being 'innovative' or 'new', this development could arguably be seen as a return to the past in that it resembled the evolution of 'combined operations' during the inter-war years (not to mention also similar—but far more limited—organisational developments). As such, this fundamentally differed from the American development of *amphibious* warfare, which was generally maintained distinctly as a form of 'naval warfare' and 'sea power', both after and before World War II.

The 'Seaborne/Airborne/Land Operations' Concept, 1959-61

Whilst many of the analyses concerning the Commando Carrier concept and amphibious lift replacement requirements referred to the employment of both seaborne and airborne forces, it was not until the end of 1959 that consideration was given to their mutual co-ordination, planning and training. As cited above, CAW first outlined the operational rationale behind what would eventually evolve into the over-arching concept of 'joint warfare' in a letter to the new CDS, Lord Mountbatten, on 19 November. To recap: 'In the present air age, amphibious warfare

⁹²³ COS (62) 373, 3-4, 7.

⁹²⁴ COS 88/63, 5.3.63 (DEFE 5/136; NA).

⁹²⁵ Wettern, 227-228.

must be assessed as a means of strategic mobility in relation to air transport and air assault operations'.⁹²⁶ Under the heading of 'Smaller Operations', CAW noted that a Commando Carrier and an Assault Ship, both based east of Suez, would be no more than 8 days away 'from any objective' in that area; in that same time period, 'the Strategic Airlift would be able to deliver two lightly equipped battalion groups'. Both of these capabilities employed together could therefore 'produce a brigade group with a proportion of armour and vehicles, in addition to the great tactical mobility given by the helicopters [of the Commando Carrier]'.⁹²⁷

Although CAW repeated his call for 'the co-ordination for sea and air lifts' in his 1959 annual report,⁹²⁸ it was not until a full year later that he was able to report any significant progress.⁹²⁹ By that time, the theoretical aspects of the concept had been examined by both AWHQ and JSAWC with presentations having been made 'at the Staff Colleges, Senior Officers' Courses and appropriate operational Commands'. In addition, while the concept was deemed 'most effective in the post-1965 form using future equipment, it [was] equally applicable to the existing lift'. As such, and at the request of the Chiefs, CAW began to undertake extensive efforts to study the 'co-operation between RAF operations and amphibious operations'.⁹³⁰

By mid-1961, the parameters of the 'seaborne/airborne/land operations' concept had been accepted by the Chiefs of Staff.⁹³¹ These types of enterprises were generally considered to be 'limited war operations', which were a step up in scale and character from the 'cold war' operations that had exemplified the early and mid-1950s. More specifically, they involved 'the rapid concentration of land forces, with naval and air offensive and transport support' at long distances 'from main bases'. They also 'could vary from an unopposed entry to a combined air and seaborne assault', although attacks against heavy opposition were 'not contemplated'.

⁹²⁶ COS (59) 312, 2.

⁹²⁷ COS (59) 312, 2-3.

⁹²⁸ COS (60) 1, 2-3.

⁹²⁹ COS (61) 12, 13.1.61 (DEFE 2/2067, folio 49; NA).

⁹³⁰ COS (61) 12, 2, Annexes A and B.

⁹³¹ COS (61) 180, 8.6.61 (DEFE 5/114; NA).

Finally, due to the fact that the available forces could be drawn from a myriad of sources and locations, a ‘high degree of flexibility and inter-Service training’ was required.⁹³²

Joint Seaborne/Airborne ‘Reinforcement’ of Kuwait, 1961 – Operation VANTAGE

Somewhat fortuitously, at least from a conceptual point of view, ‘Reinforced Theatre Plan (Arabian Peninsula) No. 7 – Operation VANTAGE’⁹³³ had to be implemented in the summer of 1961 to assist in the defence of Kuwait against what appeared to be an imminent attack by Iraq. Although this enterprise was initially dominated by the amphibious (helicopter) landings of 42 Commando from the new commando carrier, HMS *Bulwark*, the overall endeavour turned out to be a veritable test case of the ‘seaborne/airborne/land operations’ concept.⁹³⁴

As a matter of fact, Operation VANTAGE—previously code-named ALECTO, CABRILLA, ALDERDALE and RIGAMAROLE—was based primarily upon the rapid movement of infantry formations and (light) supporting arms *by air*, not by sea. This operational scheme had been established as early as October, 1959, when the land forces deemed available were:

- (a) The parachute battalion from Cyprus.
- (b) An infantry battalion/Commando from Aden.
- (c) The Theatre Reserve in Kenya, i.e. Bde HQ and two infantry battalions.
- (d) Supporting arms.⁹³⁵

These forces could be either ‘air-landed within 48 hours of the decision to mount the operation’ when there was ‘no opposition...expected’ or employed in ‘an initial air drop...to secure an airfield...[which] would take 4 days to prepare’. In the meantime, measures were being undertaken to strengthen the amount of available (heavy) supporting arms, which would be transported primarily by sea, mainly through the proposed move of a tank squadron to Aden

⁹³² COS (61) 180, 2.

⁹³³ CDS, ltr to MD, 28.2.61 (DEFE 13/89, folio 17; NA), 1. See also MOD (NHB), BR 1736(55), *MIDDLE EAST OPERATIONS: Jordan/Lebanon – 1958, Kuwait – 1961*, 9.68 (ADM 234/1068; NA), 41.

⁹³⁴ See, for example, Speller, ‘Role’, Chapter 7; ‘NAVAL DIPLOMACY: Operation Vantage, 1961’ in Speller, Ian, (ed.), *The Royal Navy and Maritime Power in the Twentieth Century*, Cass Series: Naval Policy and History, 31 (Abingdon/New York, NY: Frank Cass, 2005), 164-180; and ‘Kuwait: Operation VANTAGE, July 1961’ in Lovering (ed.), Chapter XXXII. See also Alani, Mustafa, *Operation Vantage: British Military Intervention in Kuwait, 1961* (Surbiton: LAAM, 1990); and Brown, *Strategic Mobility*, Chapter 4, Section IV.

⁹³⁵ —, ‘Plans for Intervention in Kuwait’, 6.10.59 (DEFE 13/89, folio E1; NA), 1.

which was planned to occur in April, 1960 (subject to Treasury approval). In addition, to move this heavy equipment ‘and generally to improve our military posture in the area’, it had also been proposed to move the Amphibious Warfare Squadron south of the Suez Canal ‘barrier’.⁹³⁶

By the end of 1959, the original plan—ALECTO—had been replaced by CABRILLA, which was to come into effect on 1 January, 1960.⁹³⁷ Three variations of the plan were now offered, although all of them involved transporting ‘one brigade group and one parachute battalion’ by air by using ‘virtually...the whole of Transport Command as well as the theatre transport forces of MEAF, BFAP and FEAF’.⁹³⁸ It was estimated that such an infantry force could be built up within 6 to 11 days with the latter time premising ‘an airborne operation to secure Kuwait airfield’.⁹³⁹

Whether VANTAGE was the result of any new planning is unclear but, by February of 1961, a revised plan had been finalised yet again. This took into account a number of force redeployments in the region, which had improved the overall military situation in the Middle East, particularly south of the ‘barrier’. They included more transport aircraft in Transport Command, a ‘squadron of tanks’ (half ashore, half afloat in LSTs), additional Kuwaiti tanks ‘being stockpiled’ ashore, ‘[a]rtillery being stockpiled at Bahrein’, and ‘the Amphibious Warfare Squadron south of the barrier’.⁹⁴⁰ Most of these changes were the cause of the overall increase in the plan’s amphibious character,⁹⁴¹ which was expanded even further less than two months later when the Commando Carrier (and embarked Commando) was added to the list of ‘Naval Forces’ (and ‘Land Forces’) available for this contingency.⁹⁴²

As it turned out, what ultimately gave Operation VANTAGE its predominantly amphibious character was twofold: first, the fact that 42 Commando RM had landed by

⁹³⁶ ‘Plans’, 1-2.

⁹³⁷ CDS, ltr to MD, 14.12.59 (DEFE 13/89, folio 1; NA). MOD (London), message to HQ, BFAP, 11.12.59 (DEFE 13/89, folio 2; NA).

⁹³⁸ ‘MEAF’, ‘BFAP’, and ‘FEAF’ stand for ‘Middle East Air Forces’, ‘British Forces Arabian Peninsula’ and ‘Far East Air Forces’, respectively.

⁹³⁹ CDS, ltr to MD, 11.12.59, 1-2. See also ___, ‘Comparison in Build Up in Kuwait Between Cabrilla and Alecto’, n.d. (DEFE 13/89, folio 3; NA), 1-2.

⁹⁴⁰ CDS, ltr to MD, 28.2.61, 1.

⁹⁴¹ COS (62) 58, 15.2.62 (DEFE 5/124; NA), 2.

⁹⁴² DCDS, ltr to MD, 26.4.61 (DEFE 13/89, folio 19; NA).

helicopter from HMS Bulwark; and second the fact that 42 and 45 Commandos RM were the only infantry units ashore until early on the third day of the operation (3 July), which appeared to have deterred an Iraqi attack that 'seemed possible on 1st and 2nd July'.⁹⁴³ While this circumstance 'reflected the value of the Commando Carrier in this operation', it was nevertheless pointed out that the Carrier 'must continue to remain only a bonus in any future plans' because this 'value' essentially depended on the Carrier's location in relation to any given crisis. Fortunately, and despite claims that the presence of HMS *Bulwark* was 'fortuitous',⁹⁴⁴ it was later demonstrated that this was only 'somewhat' so, due to the fact that there had been a general warning in advance and some perceptive preparations on the part of the *Bulwark*'s captain.⁹⁴⁵

A few vital points must still be kept in mind, however, to assess this operation from a broader operational perspective, or perhaps from the viewpoint of overall 'strategic mobility'. First, the reason why the planned airborne (or air-landed) forces were not employed immediately was not due to any inherent fault or limitation nor was it driven by any inherent advantages of the 'amphibious forces' (other than they were at the right place at the right time). Instead, over-flying rights were denied to the airborne forces by Turkey and Sudan on the first night of VANTAGE's implementation (30 June/1 July).⁹⁴⁶ Second, although another 'amphibious' unit, 45 Commando, was the second British infantry formation to arrive in Kuwait, the formation was air-landed (not landed amphibiously) from Aden (on 2 July). Third, a half squadron of 3 Dragoon Guards (*i.e.*, tanks) was landed on 1 July as were two companies of 2 Coldstream Guards, followed by the Para Light Battery, elements of 24 Brigade HQ & JAHQ, and the tanks of the other half squadron 3 Dragoon Guards on 2 July, all of which were Army units. Whilst the addition of Nos. 8 and 208 Squadrons (RAF) by 3 July made the initial part of the landing force essentially joint, the overall landing force was soon to be dominated by Army forces. Indeed, by

⁹⁴³ COS (61) 378, 18.10.61 (DEF 5/118; NA), 3.

⁹⁴⁴ See COS (61) 378, 6-7; and BR 1736(55), 52.

⁹⁴⁵ Grove, *Vanguard*, 246-247.

⁹⁴⁶ COS (61) 378, 10-12, 14-15.

the time that the 'Build up' was considered complete on 9 July, Army personnel outnumbered Navy (*i.e.*, almost exclusively RM) personnel by a ratio of more than four to one.⁹⁴⁷

A JPS/COS review of the after-action report of the Commander-in-Chief, Middle East, reinforced many of the points made above. First, it specifically noted the *joint* nature of the plans for the operation, which 'provided for the rapid deployment of a reinforced brigade group, with air and naval support, into Kuwait in various circumstances'. Second, it also recognised the emphasis on airborne (versus amphibious) forces, noting that the 'major part of the planned movement was by air from Cyprus, Aden and East Africa to Kuwait, with some reinforcements from the United Kingdom and Far East'.⁹⁴⁸ Finally, the JPS noted that due to the fact that artillery was not landed until the third day (because it was supposed to arrive by air, which was delayed), artillery should be embarked on Commando ships, something which had already been studied.⁹⁴⁹ In sum, the JPS was able to conclude that

[t]he success of this operation supports our current seaborne/airborne concept of limited war operations, in which full advantage is taken of the flexibility provided by both sea and air transport. On the one hand, a substantial land force...was speedily concentrated and supplied from distant bases by air at very short notice. On the other hand, not only were tanks, communications facilities, and eventually much needed air defence reinforcements, provided by sea, but in addition the early landing of a complete infantry unit from the Commando ship filled the dangerous gap caused by the temporary checks to the airlift in the initial stages of the operation.⁹⁵⁰

The Emergence and Development of 'Joint Warfare', 1962-64

Following the initial formulation of the 'seaborne/airborne/land operations' concept in 1960, its successful operational testing during Operation VANTAGE in 1961, and the formation of the 'Joint Service Staff' organisation in early 1962, efforts were made to further codify and refine the concept through the promulgation of doctrine. At the time, naval doctrine only devoted part of one chapter to 'Amphibious Operations' which, whilst identifying the 'two types' to be 'RAIDS' and 'INVASIONS', was generally preoccupied with a 'future Global War' scenario, not

⁹⁴⁷ COS (61) 378, 15-16.

⁹⁴⁸ COS (62) 58, 15.2.62 (DEFE 5/124; NA), 2-3.

⁹⁴⁹ COS (62) 58, 4-5, 8.

⁹⁵⁰ COS (62) 58, 8-9.

surprisingly considering it was promulgated in December 1958.⁹⁵¹ This situation notwithstanding, the first step in this process was marked by the July 1962 release of a doctrinal manuscript by the newly-formed JWS, titled *Notes on Amphibious Warfare*, which was supposed to ‘form the basis of’ a new ‘Manual’ that would address ‘the present problems of limited war within the seaborne/airborne concept’.⁹⁵² It is worth quoting at length here, if only because it accurately summarised the concept’s evolution amidst contemporary strategic and operational limitations.

In the present concept of limited war our forces must be ready to counter sudden enemy intervention in a country that is neutral or friendly to us.... The requirement is for a force that can act quickly and is ready to fight immediately in an area that may be far from its base; and that has the hitting power and mobility to take offensive action and get quick results, to prevent the war from extending or from escalating to global war.... Both sea and air transport have their advantages as methods of carrying such a force. When the area of operations is within striking distance of the sea, air-transported and amphibious forces can act together to land a powerful and balanced military force. With present force levels, it is unlikely that adequate balance and force can be obtained unless airtransported and amphibious forces join together in a concerted operation. This concept of joint operations is known as the seaborne/airborne concept.... In this concept of joint seaborne/airborne operations, *the amphibious and airtransported forces are part of a single team, sea and air each providing those elements of the force best suited to their characteristics and to the kind of operations expected.*⁹⁵³

Although the employment of a ‘single team’ of seaborne and airborne elements was envisaged, each element still needed to be able to intervene independently (at least initially), which therefore required ‘each *element* to be balanced as far as possible’. This was especially true in cases where some opposition was expected, thus requiring a ‘deliberate assault’ and the ability of each element to be able ‘to fight their way in’.⁹⁵⁴

Whilst the *Notes* publication was divided into the usual chapters covering such issues as ‘Command’, ‘General Planning’, ‘Mounting’, and ‘Communications’, of particular interest with regard to identifying differences between British and American amphibious enterprises was Annex 1B, ‘US Concept of Amphibious Operations’. According to this, the US ‘National Approach’ was based on the following premise: ‘An amphibious operation is considered a naval

⁹⁵¹ Admiralty, BR 1806, *The Naval War Manual, 1958* (London: HMSO, 10.12.58), 95-98.

⁹⁵² JWS, *Notes on Amphibious Warfare*, 31.7.62 (Library; RMM), ‘Preface’. See also, Speller, ‘Seaborne/Airborne’, 66-67; ‘Corbett, Liddell Hart’, 236.

⁹⁵³ *Notes*, 1/1. Emphasis added.

⁹⁵⁴ *Notes*, 1/2. Various parts also quoted by Speller, ‘Seaborne/Airborne’, 69.

campaign'. This simply indicated that amphibious enterprises were the responsibility of the Naval Service and not an independent, joint agency responsibility as in the UK. This single service approach was made possible, for the most part, by the size and organisation of the Marine Corps (specifically through its FMF), which provided 'infantry...tanks, artillery, engineers and the supporting services necessary for sustained operations ashore', not to mention also 'its own aviation, including...fighters and close support aircraft, helicopters and fixed-wing transport'. From these resources, most of the emphasis was placed on three types of special equipment: 'helicopters for troop-carrying'; 'the LVT'; and aircraft for 'close air support'. One final unique difference was that American amphibious forces conceptualised these endeavours in atomic-use environments, as they were also armed with 'nuclear artillery'.⁹⁵⁵

It was not until the early spring of 1963 that urgent attention was turned towards accelerating the production of the new *Manual of Joint Warfare*.⁹⁵⁶ This document was ultimately supposed to 'incorporate into one series of publications all the information at present contained in various documents and manuals such as Land/Air Warfare Policy Statements, [and] Joint Warfare Instructions'.⁹⁵⁷ The latter of these were being issued to promulgate 'urgently needed tactical doctrines and joint procedures' with four coming into effect on 15 June and one on 1 August 1963.⁹⁵⁸ By 30 September, all of the relevant data had been collated into a total of six Volumes, which were already under review by the JWS.⁹⁵⁹

With this final evolution of the 'seaborne/airborne/land operations' concept into official 'joint warfare' doctrine, British amphibious/expeditionary development seemed to have come 'full circle' in that it essentially reflected the inherently joint character of the original 'combined operations' concept of the inter-war period. Indeed, from a purely conceptual standpoint, one only has to compare the definitions of 'joint warfare' and 'combined operations' as outlined in

⁹⁵⁵ Notes, Annex 1B.

⁹⁵⁶ See Speller, 'Seaborne/Airborne', 70-71; 'Corbett, Liddell Hart', 236-237.

⁹⁵⁷ COS 93/63 (issued 1st March, 1963), paras. 9, 11, 20(e); Appendices II, III.

⁹⁵⁸ See [JWS], *JWI Nos. 1-4*, [15.6.63]; and [JWS], *JWI No. 5*, [1.8.63] (DEFE 2/2086; NA). See also JWS (62) 2 (Second Revised Final), 2.6.62, (DEFE 11/367, folio 21; NA), 1.

⁹⁵⁹ See JWS 'State of Work' summaries (DEFE 11/368, folios 90, 105, 107; NA).

the doctrine of each era to make this connection. On the one hand was the definition of ‘joint warfare’ which, as cited above, was simply classified as: ‘The employment of sea and/or air forces in concert with land forces’. On the other hand were the definitions in the 1925 and 1931 editions of the *Manual of Combined Operations*, which were almost exactly the same. ‘Combined operations’ were described as those ‘forms of operations where naval, military or air forces in any combination are co-operating with each other, working independently under their respective commanders, but with a common strategical object’.⁹⁶⁰ A slightly narrower definition was offered in the 1938 edition, which focused on ‘one of the principal forms of combined operation [that] may be undertaken by British arms’: a ‘sea-borne expedition of military and air forces, assisted by the navy and relying on naval and air force protection’.⁹⁶¹

This was also the case from an organisational point of view as the new *Manual of Joint Warfare* effectively mirrored the contents of the inter-war ‘combined operations’ manuals, albeit in a multi-volume format, which was arranged as follows:⁹⁶²

- Volume I – *Concepts, Planning and Control of Limited War Operations*
- Volume II – *Joint Tactical Communications*
- Volume III – *Air Transport Operations*
- Volume IV – *Amphibious Operations*
- Volume V – *Offensive Support Operations*
- Volume VI – *Tactical Air Defence Operations*

Volume I (the capstone manual, with short title ‘*JSP I*’), for example, basically summarised those principles that were applicable to all forms of ‘joint warfare’—defined as ‘any operation in which sea and/or air forces act in concert with ground forces’.⁹⁶³ Indeed, the subject areas covered resembled those addressed in Chapters I through VIII of the 1925 and 1931 *Combined Operations* manuals and Parts I and II of the 1938 edition.⁹⁶⁴ Similarly, the topics included in Volume V, *Offensive Support Operations*, resembled those covered in Chapters 9 and 10 of the 1925 edition, Chapters 14 and 15 of the 1931 edition, and (loosely) Part IX of the 1938 version.

⁹⁶⁰ ADM/WO/AM, *Manual of Combined Naval, Military and Air Operations*, 1925 (AIR 10/1206), 11.

⁹⁶¹ [ADM/WO/AM], *Manual of Combined Operations*, 1931 (DEFE 2/708; NA); and [ADM/WO/AM], *Manual of Combined Operations*, 1938 (DEFE 2/709; NA), 17.

⁹⁶² [JWS], *Manual of Joint Warfare*, Volume I, *Concept, Planning and Control of Limited War Operations*, 1.3.70 (3rd edn.) (DEFE 73/1; NA). Short title: ‘*JSP I*’.

⁹⁶³ *JSP I*, 1—1.

⁹⁶⁴ Other chapters from the 1925 edition would probably have included XXI and XXII.

This held true for Volume VI, *Tactical Air Defence*, specifically with regard to Chapters 11 and 19, Chapter 16, and Part VIII of the three editions, respectively. All the rest would have been applicable to Volume IV, *Amphibious Operations*, except for isolated sections and paragraphs in the 1938 manual, which could have been included in Volume III, *Air Transport Operations*, had enough advances been made in that field to warrant such coverage.⁹⁶⁵

In describing the general ‘Characteristics of UK Forces’, *JSPI* categorised them as three types: ‘Forces Assigned to NATO’, ‘Air Transport’ and ‘Shipping’, the latter two of which reflected developments that had emerged in earnest since the mid-1950s.⁹⁶⁶ ‘Air Transport’, in turn, was separated into ‘Strategic’ and ‘Tactical’ classifications with the latter including three kinds of ‘Airborne operations. (a) Parachute assault. (b) Helicopterborne tactical support. [and] (c) Air landing’, all of which were detailed further in Volume III, *Air Transport Operations*.⁹⁶⁷ The aforementioned ‘Shipping’ category, in turn, was separated into ‘three broad groups’, including ‘Warships’, ‘Amphibious Ships’, and ‘Merchant Shipping’. While there were far fewer details provided for each, most were listed under ‘Amphibious Ships’, although specific reference was made to ‘Volume IV of this Manual’ for more information.⁹⁶⁸

Volume I then outlined the ‘Types of Operations’ that British armed forces were expected to undertake in various geo-strategic scenarios that had evolved since the 1950s. Of these, ‘Limited War’ and ‘Minor Operations’ (during peacetime) emerged as the two in which ‘UK amphibious forces’ would be most likely employed, especially outside NATO.⁹⁶⁹ These two types of enterprises, in fact, placed ‘the greatest call on joint warfare techniques as they frequently bring together elements of all three Services, at short notice, for immediate action’. It was also necessary that such ‘forces...retain an assault capability and be self-supporting initially’.⁹⁷⁰ Along these lines, whilst ‘minor operations’ could be mounted ‘entirely by air or

⁹⁶⁵ *Manual*, 1925; *Manual*, 1931; and *Manual*, 1938.

⁹⁶⁶ *JSPI*, 1—5-1—7.

⁹⁶⁷ *JSPI*, 1—1-1—3..

⁹⁶⁸ *JSPI*, 1—3-1—4.

⁹⁶⁹ *JSPI*, 1—5-1—6.

⁹⁷⁰ *JSPI*, 4—1.

entirely by sea' three 'Methods of Effecting Entry' were offered in which 'both methods of transport' could be employed. These included the 'Air Landed Operation', the 'Parachute Operation' and the 'Amphibious Operation'. Although the latter endeavour seemed to be the most likely to occur 'in conjunction with' either of the two above options, the maximum force size employable in each of the three scenarios now amounted up to 'brigade strength...together with logistic support including reserve stocks'.⁹⁷¹

Detailed information about the 'Amphibious Operation' was supplied by the fourth Volume of the *Manual*, which was brought into force on 18 May, 1964, thereby superseding the 1962 *Notes*.⁹⁷² Whilst very similar in content, the new publication (*JSP4*) focused a bit more narrowly on the naval aspects of amphibious warfare rather than the joint characteristics of the 'seaborne/airborne/land operations' concept. At the same time, *JSP4* also pointed out the inherently joint nature of the amphibious operation itself.

An amphibious operation brings together many types of ships, aircraft, weapons and landing forces in a coordinated effort to land a balanced military force from the sea.... *It is essentially a joint enterprise* and makes use of the principles of concentration, flexibility and surprise – by concentrating balanced forces and striking the enemy at his weakest point at the most opportune time.⁹⁷³

Indeed, this seemed to be reinforced, for instance, by the generic categorisation of the various types of ground forces made available to the Landing Force Commander for tasking, including 'Infantry' (instead of just 'Commandos'), 'Airborne Troops', and 'Helicopter-borne Troops'.⁹⁷⁴

Nevertheless, *JSP4* specifically established the 'amphibious operation' within the broader, 'present concept of intervention operations'. This tended to magnify the joint nature of the British approach to limited war operations, as this particular (seaborne/airborne) methodology was ultimately found necessary to compensate for the limitations in military resources posed by financial restrictions. As a result, and as was similarly cited in the 1962 *Notes* above, (joint) amphibious operations were effectively considered to be an integral—if not integrated—part of (joint) limited operations. Indeed, because of the 'complementary' nature of

⁹⁷¹ *JSP1*, 4—3-4—4.

⁹⁷² [JWS], *Manual of Joint Warfare*, Volume IV, *Amphibious Operations*, 18.5.64 (Library; RMM). Short title: '*JSP4*'.

⁹⁷³ *JSP4*, para. 4101. Emphasis added.

⁹⁷⁴ *JSP4*, 8—2-8—3.

these ‘two means of transport’, *JSP4* specifically noted that ‘it is convenient to consider them separately in this Manual of Joint Warfare’. As such, topics related to air transport—including details on helicopter landings—were covered in Volume III, *Air Transport Operations*.⁹⁷⁵ Finally, it should be noted that another Annex covering the ‘US Concept’ was included, which confirmed that the Americans still considered ‘an amphibious operation...a naval campaign’.⁹⁷⁶

Force Structure Developments

By 1965, the ‘basic principle’ of British force deployment had evolved ‘to retain in overseas theatres the minimum of forces consistent with our commitments and to hold ready in the United Kingdom a Strategic Reserve, together with the air transport necessary to reinforce at maximum speed to any part of the world’.⁹⁷⁷ As a matter of fact, this ‘principle’ had been exploited in early 1964, when indigenous forces in East Africa mutinied, specifically in Kenya, Uganda and Tanganyika, causing British forces to be dispatched using both sea and air transport.⁹⁷⁸

A big force structure change—albeit primarily affecting the 1970s, as decisions had already been made for shipping through the 1960s—involved new aircraft carriers. Indeed, this change resulted from the decision involved *not* building new aircraft carriers (i.e. the already designed CVA 01), mainly because the ‘one type of operation...for which carriers and carrier-borne aircraft would be indispensable’ was considered to be the type that Britain would not undertake without allies. This was ‘the landing, or withdrawal, of troops against sophisticated opposition outside the range of land-based air cover’. Other tasks for which aircraft carriers could be used were deemed able to be performed by land-based aircraft ‘more cheaply’; these included ‘strike-reconnaissance and air defence functions’ as well as ‘airborne-early-warning’. Despite this longer-term decision, the current fleet of carriers was still going to be employed ‘as

⁹⁷⁵ *JSP4*, 8—4. See also Volume V, *Offensive Support Operations*, 8—8-8—10.

⁹⁷⁶ *JSP4*, Annex B to Chapter I (1—5).

⁹⁷⁷ SSD, Cmnd. 2592, *STATEMENT ON THE DEFENCE ESTIMATES, 1965* (London: HMSO, 2.65), 15.

⁹⁷⁸ Cmnd. 2592, 19.

far as possible into the 1970s' so that there was enough transitional time to 'reprovide the necessary parts of the carriers' capability'.⁹⁷⁹

At the same time, British strategy seemed to continue to rely increasingly on 'air transport', which included 'a substantial improvement in...helicopter lift'.⁹⁸⁰ In fact, 'Air Mobility Forces' were given equal weight (at least on paper) as other main combat forces.⁹⁸¹ Consisting of the 'strategic transport force; the tactical transport force...; the tanker force and communications aircraft, the role of the first two were of the most significance as they competed with and/or complemented the 'seaborne force' most directly with regard to their primary role of rapid mobility and support of men and equipment in most theatres 'within 72 hours'.⁹⁸²

CONCLUSION

By 1968, amphibious forces—in fact as well as doctrine—appeared as the highest priority amongst 'Royal Navy General Combat Forces', even ahead of 'Aircraft carriers and squadrons'. With two commando ships, the HMS *Albion* and HMS *Bulwark*; two new assault ships, the HMS *Fearless* and HMS *Intrepid*, and the Royal Marine Commandos,⁹⁸³ these 'amphibious forces' resembled 'joint amphibious forces' in that they functioned to 'land troops of any infantry battalion or Royal Marine Commandos with supporting arms and transport'. More significantly, they were also supposed to 'unload tanks, vehicles, equipment and stores across open beaches' and most of these (heavier) equipment were from the Army (and Air Force).⁹⁸⁴ This was unlike the US Naval Service, which could land almost every heavy item that it had in its own inventory, although perhaps not in as large numbers as the Army (and Air Force), not quite as heavy (at least with regard to such units as heavy engineers and artillery).

⁹⁷⁹ SSD, Cmnd. 2901, *STATEMENT ON THE DEFENCE ESTIMATES, 1966: PART I – THE DEFENCE REVIEW* (London: HMSO, 2.66), 9-10.

⁹⁸⁰ Cmnd. 2901, 12.

⁹⁸¹ SSD, Cmnd. 2902, *STATEMENT ON THE DEFENCE ESTIMATES, 1966: PART II – DEFENCE ESTIMATES, 1966-67* (London: HMSO, 2.66), 23-38; and SSD, Cmnd. 3203, *STATEMENT ON THE DEFENCE ESTIMATES, 1967* (London: HMSO, 2.67), 32-41.

⁹⁸² Cmnd. 2902, 36-7.

⁹⁸³ Cmnd. 2902, 26. See also Cmnd. 3203, 34.

⁹⁸⁴ Cmnd. 2902, 27.

CONCLUSION

It has generally been accepted that modern amphibious/expeditionary warfare development in the US and the UK evolved along *similar* ‘parallel courses’ in the first few decades of the Cold War. In effect, this *international* progression culminated with NATO’s 1968 promulgation of a ‘sanitized version’ of *Doctrine for Amphibious Operations (DAO)*, which had been approved by all the American services the year before.⁹⁸⁵ However, a comparative study of American and British amphibious/expeditionary warfare development between 1945 and 1968, which is best undertaken by a re-examination of the respective *intra-national* developments—particularly from a wider (joint) *expeditionary* perspective, indicates that this era was characterised instead by the (continued) evolution of two parallel *but different* courses of development. Although these courses converged considerably over more than two decades, they nevertheless continued to be marked by some underlying differences.

This evolution went through three successive phases, the first of which was between 1945 and 1950 and revolved around the respective consolidation of national approaches or systems that had evolved from differences at the strategic, organisational/institutional, and tactical/operational levels of analysis. On the one hand was the American system that emerged primarily from the US Naval Service’s *amphibious* experience in the Central Pacific which, due to the Navy’s own extensive aviation and ground forces, was based almost exclusively on a *naval* strategy, a *single-service* organisational methodology, and *combined arms* concepts and doctrine. On the other hand was the British system that stemmed from the three Services’ *expeditionary* experience in North Africa and Europe, which was based on a *maritime* strategy, an *inter-service* organisations, and ‘*combined operations*’ (*i.e.*, joint operations) concepts, doctrine and practice. Whilst activities against these consolidation efforts in these immediate post-war years were relatively benign in the UK, debates surfaced in the US at the organisational/institutional and tactical/operational levels of analysis.

⁹⁸⁵ ___, ATP-8, *Doctrine for Amphibious Operations*, 11/7/68 (P1946CF: Box 407; OAB, NHHC).

The second phase of international development—from 1950 to 1957—was generally characterised by significant divergences within both subject countries. In the US, whilst slight shifts could be identified at all levels of analysis, they seemed to culminate at the tactical/operational level where an attempt to formulate joint amphibious doctrine resulted in a set of ‘divergent views’ being promulgated by the services. These ‘views’ represented the underlying differences between so-called ‘amphibious operations’ or ‘seizures’ championed by the US Naval Service (*i.e.*, US Navy and Marine Corps) on the one hand, and so-called ‘joint amphibious operations’ or ‘invasions’ advocated by the US Army and Air Force on the other.

In the UK, the traditional ‘combined operations’ or expeditionary approach appeared to undergo a more fundamental change, mainly at the organisational/institutional level. It was during this period that the Royal Marine Commandos were elevated from their exclusive wartime role as amphibious raiders to a more central peacetime role, principally as seaborne light infantry, for cold war (*i.e.*, ‘internal security’ and ‘Imperial policing’) and even limited war (amphibious) operations. This shift was not quite as comprehensive as apparent, not only at the organisational/institutional level but also at the tactical/operational level. With regard to the former, although the underlying efficacy of the COHQ/AWHQ establishment was challenged yet again, its value as a permanent, independent, jointly-staffed agency that would keep the traditional ‘art’ of *all* types of ‘combined operations’ alive, was ultimately re-affirmed by the decision to retain it. This was due primarily to the fear that abolishing such an entity would result in a return to a situation reminiscent of the inter-war years, when the lack of exactly such an organisation did not fill the gap created when the Services would (or, perhaps, could) not devote scarce resources to this field because of more important strategic priorities. Although the AWHQ establishment did have to undergo a significant downsizing due to continued calls for reduced defence expenditures, the fact that CAW’s directive remained almost completely unchanged (even into the early 1960s), specifically with regard to overall responsibility for amphibious

concept and doctrine development, confirmed this agency's effective endorsement by the British defence establishment.

At the tactical level, although the Commandos were elevated to the role of seaborne light infantry, they still required supporting arms and logistical elements to effect even the most rudimentary conventional amphibious landings against opposition, except in more traditional cases where they were employed against flanking or especially difficult objectives. This was not of great significance in 'internal security' or 'Imperial policing' type of endeavours, for which the Commandos appeared to be used most frequently (due to imperial overstretch and limited resources). Nevertheless, this situation effectively precluded a direct comparison with the US Marine Corps' FMF units, which were specifically organised as self-contained, self-sufficient, and fully-integrated combined arms formations, consisting of such elements as artillery, armour, engineers, and even air support.

The final phase between 1957 and 1968 experienced a gradual trend of developmental convergence between (and within) the two subject countries, although at different levels and to varying degrees. In the US, the armed services finally reached a number of (conceptual) compromises with regard to their 'divergent views', which was demonstrated by the official approval and promulgation of joint amphibious doctrine: first between the Naval Service and the Army in 1962 and subsequently amongst all services in 1967. Although the Army continued to issue unilateral doctrinal publications that promoted its broader concept of amphibious/expeditionary operations, the US Naval Service nevertheless re-emerged as America's predominant practitioner in this field. This was demonstrated not only by the expansion of the Navy's overall amphibious capabilities—almost to the point of reaching a true expeditionary capacity—but also by early amphibious operations conducted during the Vietnam War, which were almost exclusively by naval amphibious forces.

In the UK, as a result of a fundamental shift in the Royal Navy's strategic and organisational orientation that embraced cold and limited war operations, amphibious

capabilities—particularly specialised amphibious shipping and the Royal Marine Commandos—were increasingly emphasised until they effectively became the Navy’s overwhelming priority in the early 1960s. By this time, due to continued strains on defence resources, efforts at the conceptual level eventually resulted in the formulation of a broader ‘joint warfare’ concept that effectively incorporated the complementary seaborne and airborne means of strategic mobility to produce the most effective and efficient intervention (or reinforcement) capacity possible, particularly east of Suez. Organisational changes quickly followed, which effectively subsumed the entire AWHQ establishment within a new Joint Warfare committee infrastructure.

Whilst connections have been made between the evolution of this ‘innovative’ concept in the 1960s and the resurgence of British ‘expeditionary’ capabilities in recent years, based on the analysis presented, one could posit that the ‘joint warfare’ concept itself had roots in the inter-war era at both the tactical/operational and organisational/institutional levels of analysis. On the one hand were certain fundamental similarities with the original ‘combined operations’ concept that first materialised in 1925 (and even earlier), primarily the emphasis on close co-operation and co-ordination (if not integration) amongst the Services. On the other hand was the resemblance with the establishment of a DCOS Inter-Service Training sub-committee as well as the Inter-Service Training and Development Centre (ISTDC) in the 1937-1938 timeframe, at least from an infrastructural perspective.

From the above, American *amphibious* and British *expeditionary* warfare development ultimately continued to evolve along parallel *but different* courses between 1945 and 1968. Despite various changes at the strategic, organisational/institutional, and tactical/operational levels of analysis that resulted in some significant convergence between these two country’s developmental courses, certain underlying differences appeared to remain firmly entrenched, and have continued to do so to this day.

APPENDIX A: LIST OF ABBREVIATIONS/ACRONYMS

This Appendix consists of an alphabetical list of acronyms used throughout the dissertation. (Data within the parentheses indicate the nationality of each one.) Please note that there is frequently more than one meaning for each term.

GENERAL

• 1SL/FSL	First Sea Lord (UK)
• AAF	Army Air Forces (US, pre-1947)
• AC/S	Assistant Chief of Staff (UK/US)
• ACO	Advisor on Combined Operations (UK)
• ADM	Admiralty (UK)
• ADM/Adm	Admiral (UK/US)
• AEW	Airborne Early Warning (UK/US)
• AF	Amphibious Force (US)
• AFM	Air Force Manual (USAF)
• AFSC	Armed Forces Staff College (US)
• AG/AmphGp	Amphibious Group (US)
• AM	Air Ministry (UK)
	Amphibious Manual (US)
• ANGLICO	Air and Naval Gunfire Liaison Company (US)
• AOTC	Amphibious Operations Training Centre (UK)
• ARG	Advanced Research Group (US)
	Amphibious Ready Group (UK/US)
• ASRM	Amphibious School, Royal Marines (UK)
• ATC	Amphibious Training Command (US)
• ATF	Amphibious Task Force (US)
• AtlFlt	Atlantic Fleet (US)
• AW	Amphibious Warfare (UK)
• AWC	Amphibious Warfare Centre (UK)
	Army War College (US)
• AWHB/COHB	Amphibious Warfare/Combined Operations Handbook (UK)
• AWHQ	Amphibious Warfare Headquarters (UK)
• AWS	Amphibious Warfare Squadron (UK)
• AWSS	Amphibious Warfare Signal School (UK)
• AWXE	Amphibious Warfare Experimental Establishment (UK)
• BAOR	British Army on the Rhine (UK)
• BD	Base Defense [Manual] (US)
• Bde	Brigade (UK/US)
• BJSM	British Joint Services Mission (UK)
• BLT	Battalion Landing Team (US)
• BNSP	Basic National Security Policy (US)
• C&GSC	Command and General Staff College (US)
• C/S	Chief of Staff (UK/US)
• CAS	Chief of the Air Staff (UK)
	Close Air Support (US)
• CATF	Commander, Amphibious Task Force (US)
• CAW	Chief of Amphibious Warfare (UK)

• CCO	Chief of Combined Operations (UK: from Mar 1942) Commodore, Combined Operations (UK: Dec 1941 to Mar 1942)
• CCOR (at BJSM)	Chief of Combined Operations Representative (UK)
• Cdo	Commando (UK)
• CDS	Chief of Defence Staff (UK)
• CG	Commanding General (US/UK)
• CGRM	Commandant General, Royal Marines (UK)
• CIGS	Chief of the Imperial General Staff (UK)
• CINCLANTFLT	Commander-in-Chief, Atlantic Fleet (US)
• CINCPACFLT	Commander-in-Chief, Pacific Fleet (US)
• CJATF	Commander, Joint Amphibious Task Force (US)
• CJCS	Chairman, Joint Chiefs of Staff (US)
• CLF	Commander, Landing Force (US)
• CMC	Commandant of the Marine Corps (US)
• CMCS	Commandant, Marine Corps Schools (US)
• CNO	Chief of Naval Operations (US)
• CNS	Chief of the Naval Staff (UK)
• COC	Combined Operations Centre (UK)
• COCOS	Chief of Combined Operations Staff (UK)
• COHQ	Combined Operations Headquarters (UK)
• CONARC	Continental Army Command (US)
• COP	Combined Operations Pamphlet (UK)
• COPP	Combined Operations Pilotage Party (UK)
• COS	Chiefs of Staff [Committee] (UK)
• COSSAC	Chief of Staff, Supreme Allied Commander (UK/US)
• COXE	Combined Operations Experimental Establishment (UK)
• CSA	Chief Scientific Advisor (UK)
• CTC	Combined Training Centre (UK)
• DA	Department of the Army (US)
• DAF	Department of the Air Force (US)
• DC/S	Deputy Chief of Staff (US)
• DCAS	Deputy Chief of the Air Staff (UK)
• DCIGS	Deputy Chief of the Imperial General Staff (UK)
• DCNO	Deputy Chief of Naval Operations (US)
• DCO	Director of Combined Operations (UK)
• DCOS(IT)	Deputy Chiefs of Staff [Committee], Inter-Services Training Sub-Committee
• DN/DON	Department of the Navy (US)
• DOD	Department of Defense (US)
• DOS	Department of State (US)
• FM	Field Manual (US)
• FMF	Fleet Marine Force (US)
• FMFM	Fleet Marine Force Manual (US)
• FSL/1SL	First Sea Lord (UK)
• GOC	General Officer Commanding (UK)
• HMS	Her/His Majesty's Ship (UK)
• HQMC	Headquarters, USMC (US)
• ID/InfDiv	Infantry Division (US)

• ISTDC	Inter-Services Training and Development Centre (UK)
• JAAF	Joint Action Armed Forces (US)
• JAAN	Joint Action of the Army and Navy (US)
• JAB	Joint Amphibious Board (US)
• JADB	Joint Air Defense Board (US)
• JAirbTB	Joint Airborne Troop Board (US)
• JASCO	Joint Assault Signal Company (US)
• JATB	Joint Air Transport Board (US)
• JATF	Joint Amphibious Task Force (US)
• JCS	Joint Chiefs of Staff (US)
• JFSC	Joint Fire Support Centre (UK)
• JLFB	Joint Landing Force Board (US)
• JOC	Joint Operations Centre (UK)
• JPS	Joint Planning Staff (UK/US)
• JSAWC	Joint Services Amphibious Warfare Centre (UK)
• JTF	Joint Task Force (US)
• JTSB	Joint Tactical Support Board (US)
• JWC	Joint Warfare Committee (UK)
• JWE	Joint Warfare Establishment (UK)
• JWS	Joint Warfare Staff (UK)
• LCOCU	Landing Craft Obstruction Clearance Unit (UK)
• LF	Landing Force (US)
• LFB	Landing Force Bulletin (US)
• LFM	Landing Force Manual (US)
• MAG	Marine Air Group (US)
• MAGTF	Marine Air-Ground Task Force (US)
• MarDiv	Marine Division (US)
• MAW	Marine Air Wing (US)
• MC	Maneuver Commander (US)
• MCB	Marine Corps Board (US)
• MCDC	Marine Corps Development Center (US)
• MCS	Marine Corps Schools (US)
• MD	Minister of Defence (UK)
• MELF	Middle East Land Forces (UK)
• MOD	Ministry of Defence (UK)
• MT	Ministry of Transport (UK)
• NATO	North Atlantic Treaty Organisation
• NAVSEA	Naval Sea Systems Command (US)
• ND	Navy Department (US; pre-1947)
• NDU	National Defense University (US)
• NME	National Military Establishment (US)
• NWC	Naval War College (US)
• NWIP	Naval Warfare Information Publication (USN)
• NWP	Naval Warfare Publication (USN)
• OCNO	Office of the Chief of Naval Operations (US)
• OSD	Office of the Secretary of Defense (US)
• PacFlt	Pacific Fleet (US)
• PAO	Principle Administrative Officer (UK)
	Pacific Area of Operations (US)

• PHIB	Amphibious [Manual] (USMC)
• POA	Pacific Ocean Area (US)
• PM	Prime Minister (UK)
• OCNO	Office of the Chief of Naval Operations (US)
• OSD	Office of the Secretary of Defense (US)
• RAC	Royal Armoured Corps (UK)
• RAF	Royal Air Force (UK)
• RAMC	Royal Army Medical Corps (UK)
• RAOC	Royal Army Ordnance Corps (UK)
• RASC	Royal Army Service Corps (UK)
• RAW	Responsibility for Amphibious Warfare [Committee] (UK)
• RE	Royal Engineers (UK)
• REME	Royal Electrical and Mechanical Engineers (UK)
• RLT	Regimental Landing Team (US)
• RM	Royal Marines (UK)
• RN	Royal Navy (UK)
• RTR	Royal Tank Regiment (UK)
• SAFM/SAFR	Senior Air Force Member/Representative (US)
• SAM/SAR	Senior Army Member/Representative (US)
• SAW	School of Amphibious Warfare (UK)
• SB	Special Board (US)
• SBB	Scottish Beach Brigade (UK)
• SCO	School of Combined Operations (UK)
• SEATO	Southeast Asia Treaty Organisation
• SECDEF/SecDef	Secretary of Defense (US)
• SECNAV/SecNav	Secretary of the Navy (US)
• SLAW	School of Land/Air Warfare (UK)
• SNM/SNR	Senior Navy Member/Representative (US)
• SMCM/SMCR	Senior Marine Corps Member/Representative (US)
• SRC	Shipping Resources Committee (UK)
• SSD	Secretary of State for Defence (UK)
• STOL	Short Take-Off and Landing
• TEC	Troop Exercise Coordinator (US)
• TF	Task Force
• TTU	Troop Training Unit (US)
• UDT	Underwater Demolition Team (US)
• UG	Umpire Group (US)
• UNAAF	Unified Action Armed Forces (US)
• USA	United States Army (US)
• USAF	United States Air Force (US)
• USCG	United States Coast Guard (US)
• USF	United States Fleet [Publication] (US)
• USMC	United States Marine Corps (US)
• USN	United States Navy (US)
• U-SS	Under-Secretary of State (UK)
• USS	United States Ship (US)
• V/STOL	Vertical/Short Take-Off and Landing
• VC/S	Vice Chief of Staff (US)
• VCAS	Vice Chief of the Air Staff (UK)

- VCIGS Vice Chiefs of the Imperial General Staff (UK)
- VCNS Vice Chief of the Naval Staff (UK)
- VTOL Vertical Take-Off and Landing
- WD War Department (UK)
- War Department (US; pre-1947)
- WO War Office (UK)

APPENDIX B: GLOSSARY OF AMPHIBIOUS EQUIPMENT⁹⁸⁶

The descriptions that accompany the letter designations below use the most original (technical) terminology whenever possible. In certain cases, more practical (and officially accepted) language is also offered in parentheses, which provides for more accurate (*i.e.*, functional) descriptions.⁹⁸⁷

AMPHIBIOUS SHIPS

- AK Auxiliary, Cargo (US: known as ‘cargo ship’; assault variant re-designated ‘AKA’ in 1943)
- AKA Auxiliary, Cargo, Attack (US: known as ‘attack cargo ship’; 1943-1969 designation)
- AP Auxiliary, Personnel (US: known as ‘transport’ or ‘transport ship’; assault variant re-designated ‘APA’ in 1943)
- APA Auxiliary, Personnel, Attack (US: known as ‘attack transport’; 1943-1969 designation)
- APD Auxiliary, Personnel, Destroyer (US: known as ‘transport destroyer’ or ‘auxiliary transport destroyer’)
- ATD Amphibious Transport, Dock (UK)
- CV Carrier, Fixed-wing (US)
- CVA Carrier, Fixed-wing, Attack (US)
- CVE Carrier, Fixed-wing, Escort (US)
- CVHA Carrier, Fixed-wing, Helicopter, Attack (US)
- CVS Carrier, Fixed-wing, Support (US)
- LPD Landing [Ship], Personnel, Dock (US)
- LPH Landing [Ship], Personnel, Helicopter (US)
- LSA Landing Ship, Assault (UK)
- LSD Landing Ship, Dock (UK/US)
- LSH Landing Ship, Headquarters (UK)
- LSI Landing Ship, Infantry (UK)
- LSL Landing Ship Logistic (UK)
- LSM Landing Ship, Medium (US)
- LSMR Landing Ship, Medium, Rocket (US)
- LSS Landing Ship, Stern-chute (UK)
- LST Landing Ship, Tank (UK/US: number in parentheses indicates type, *e.g.*, LST(1), LST(2), etc.)
- LST(A) Landing Ship, Tank (Assault) (UK)
- LST(C) Landing Ship, Tank (Command) (UK)
- LSU Landing Ship, Utility (US: ex-LCT; later LCU)
- LSV Landing Ship, Vehicle (US)

⁹⁸⁶ The information for Amphibious Ships, Craft and Vehicles has been compiled primarily from Friedman, Norman, *US Amphibious Ships and Craft: An Illustrated Design History* (Annapolis, MD: NIP, 2002). See also Ladd, J. D., *Assault from the Sea 1939-1945: The Craft, The Landings, The Men* (Newton Abbot: David Charles, 1976) as well as HQ, US Army Materiel Command, AMCP 706-350, *Engineering Design Handbook: Wheeled Amphibians* (Washington, DC: USAMC, 1/11/71), for details of wheeled amphibians.

⁹⁸⁷ See Friedman, *US*, xiii-xx (‘Abbreviations’) and 495 (‘Appendix C: Amphibious Ships’).

AMPHIBIOUS CRAFT

- LCA Landing Craft, Assault (UK: number in parentheses indicates type, *e.g.*, LCA(1), LCA(2), etc.)
- LCC Landing Craft, Control (US)
- LCF Landing Craft, Flak (UK)
- LCG Landing Craft, Gun (UK/US)
- LCI Landing Craft, Infantry (UK/US)
- LCM Landing Craft, Mechanised (UK/US: number in parentheses indicates type, *e.g.*, LCM(1), LCM(2), etc.)
- LCN Landing Craft, Navigation
- LCP Landing Craft, Personnel (UK/US)
- LCR Landing Craft, Rubber (UK/US)
- LCS Landing Craft, Support (US)
- LCT Landing Craft, Tank (UK/US: number in parentheses indicates type, *e.g.*, LCT(1), LCT(2), etc.)
- LCU Landing Craft, Utility (US: ex-LCT and -LSU)
- LCV Landing Craft, Vehicle
- LCVP Landing Craft, Vehicle, Personnel

AMPHIBIOUS VEHICLES (AMPHIBIANS)

- BARC Barge, Amphibious Resupply, Cargo (US)
- DD Tank Duplex Drive Tank (UK/US)
- DUKW 1942, Amphibious, Front-, [and] Rear-Wheel Drive (US)
- LARC Lighter, Amphibious Resupply, Cargo (US)
- LVT Landing Vehicle, Tracked (UK/US: number in parentheses indicates type, *e.g.*, LVT(1), LVT(2), etc.)
- LVT(A) Landing Vehicle, Tracked (Armoured) (US: number in parentheses indicates type, *e.g.*, LVT(A)(1), LVT(A)(4), etc.)
- LVTE Landing Vehicle, Tracked, [Combat] Engineer (US)
- LVTH Landing Vehicle, Tracked, Howitzer (US)
- LVTP Landing Vehicle, Tracked, Personnel (US)
- LVW Landing Vehicle, Wheeled (US)

HELICOPTERS⁹⁸⁸

- HO2S/HO3S US: Sikorski-built (S-51; R-5/H-5 ‘Dragonfly’)
UK: Westland-built (‘Dragonfly’)
- HO4S/HRS US: Sikorski-built (S-55; H-19 ‘Chickasaw’)
UK: Westland-built (‘Whirlwind’)
- HO5S US: Sikorski-built (S-52; H-18)
- HOK US: Kaman-built (K-600; H-43 ‘Huskie’)
- HR2S US: Sikorski-built (S-56; H-37 ‘Mojave’)
- HRB US: Boeing-Vertol-built (H-46)
- HRP US: Piasecki-built (H-21 ‘Workhorse’/‘Shawnee’)
- HRS (see HO4S above)
- HUS US: Sikorski-built (S-58; H-34 ‘Choctaw’)

⁹⁸⁸ See Polmar, Norman, and Floyd D. Kennedy, Jr., *Military Helicopters of the World: Military Rotary-Wing Aircraft Since 1917* (Annapolis, MD: NIP, 1981), Appendix B.

- H-1 UK: Westland-built ('Wessex')
- H-46 Bell-built ('Iroquois')
- H-47 US: Boeing-Vertol-built ('Sea Knight')
- H-53 US: Boeing-built ('Chinook')
- H-54 US: Sikorski-built (S-65; 'Sea Stallion')
- H-54 US: Sikorski-built ('Tarhe')

Helicopter Letter Designations

- 1948-1962
 - B: Boeing
 - H: Helicopter
 - K: Kaman (manufacturer)
 - O: Observation
 - P: Piasecki (manufacturer)
 - R: Transport
 - S: Sikorski (manufacturer)
 - U: Utility
- 1962- (Prefixes)
 - A: Attack
 - C: Cargo
 - H: Search and Rescue
 - O: Observation
 - U: Utility
 - V: VIP
 - X: Experimental
 - Y: Prototype

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BIBLIOGRAPHICAL NOTE:

A number of research facilities were visited to glean the most relevant primary sources. In the United States, the most valuable repositories were the National Archives and Records Administration in College Park, Maryland (NARA) and the Marine Corps Research Centre (MCRC) at the Marine Corps University in Quantico, Virginia. Also important were the Marine Corps Historical Center (MCHC) and the Naval Historical Center (NHC), both of which were located at the Washington Navy Yard in Washington, DC. While the latter facility was recently rechristened as the Navy Historical & Heritage Command (NHHC), the former was transferred in its entirety to Quantico and renamed as the Marine Corps Historical Division (MCHD).

NARA houses the official records of the US armed forces and was the best source of diverse materials on such matters as concepts and doctrine. The most helpful sources were found in Records Group 127 (Records of the United States Marine Corps). The MCRC, which houses the Archives Branch (AB), retains the famous Historical Amphibious File (HAF) consisting of the most significant documents in the evolution of American (naval) amphibious warfare development. The NHHC's Operational Archives Branch (OAB) contained the 'Post World War II Command File', in which most amphibious warfare doctrinal manuals were located. Finally, the former MCHC's library also housed a considerable number of older doctrinal manuals as well as a considerable amount of general historical information on early concepts.

The main source of primary documentation in Britain was the National Archives (NA; formerly the Public Record Office—PRO) located in Kew Gardens, London. Of central value were the Combined Operations Headquarters and Ministry of Defence file (DEFE 2), the Chiefs of Staff Committee memoranda file (DEFE 5). Also valuable were various sources located in the Admiralty (ADM) and War Office (WO) files.

Two other locations in the UK deserve mention. One is the Royal Marines Museum (RMM) in Portsmouth, which houses a small but valuable archival research facility. This contained a variety of miscellaneous files that included analyses ranging from differences in World War II amphibious technique to various examples of amphibious and joint warfare doctrine. The other is the Broadlands Archives (BA) located at the University of Southampton, which holds the private papers of Lord Louis Mountbatten. As this man served, at one point or another during his extensive career, as Chief of Combined Operations (1941-1943), First Sea Lord (1955-1959) and Chief of Defence Staff (1959-1965), some of his attitudes and actions had a considerable influence on British developments, both directly and indirectly.

NOTE: Abbreviations listed below are those that are used throughout the thesis.

I. PRIMARY MATERIAL

A. Unpublished

(i) *United Kingdom*

British Library (BL): London, UK

- Reading Room
- Manuscripts Reading Room

Broadlands Archives (BA): Southampton, UK

Mountbatten Papers (MB1)

- MB1/B: Fifth Destroyer Flotilla and Combined Operations, 1939-43
- MB1/C: South East Asia Command, 1943-46
- MB1/I: First Sea Lord, 1955-9
- MB1/J: Chief of the Defence Staff, 1959-65

National Archives (NA): London, UK

ADM: Records of Admiralty, Naval Forces, Royal Marines, Coastguard, and related bodies 1205-1998

- ADM 1: Admiralty, and Ministry of Defence, Navy Department: Correspondence and Papers 1660-1976
- ADM 116: Admiralty: Record Office: Cases 1852-1965
- ADM 201: Admiralty and Ministry of Defence: Royal Marine Office: Correspondence and Papers 1761-1983
- ADM 202: Admiralty and Ministry of Defence: Royal Marines: War Diaries, Unit Diaries, Detachment Reports and Orders 1939-1980
- ADM 205: Admiralty: Office of the First Sea Lord, later First Sea Lord and Chief of the Naval Staff: Correspondence and Papers 1937-1968
- ADM 219: Admiralty: Directorate of Operational Research and predecessors: Reports 1917-1980
- ADM 234: Admiralty, and Ministry of Defence, Navy Department: Reference Books (BR Series) 1856-1984
- ADM 239: Admiralty, and Ministry of Defence, Navy Department: Confidential Reference Books (CB Series) 1910-1985

AIR: Air records created or inherited by the Air Ministry, the Royal Air Force, and related bodies 1862-1992

- AIR 8: Air Ministry and Ministry of Defence: Department of the Chief of the Air Staff: Registered Files 1916-1982
- AIR 20: Air Ministry, and Ministry of Defence: Papers accumulated by the Air Historical Branch 1874-1983

CAB: Records of the Ministry of Defence 1808-2010

- CAB 80: War Cabinet and Cabinet: Chiefs of Staff Committee: Minutes [1939-46]

DEFE: Records of the Ministry of Defence 1808-2010

- DEFE 2: Combined Operations Headquarters later Amphibious Warfare Headquarters: Records 1937-1963
- DEFE 4: Ministry of Defence: Chiefs of Staff Committee: Minutes 1947-1978
- DEFE 5: Ministry of Defence: Chiefs of Staff Committee: Memoranda
- DEFE 6: Ministry of Defence: Chiefs of Staff Committee: Reports of the Joint Planning Staff and successors 1947-1968
- DEFE 7: Ministry of Defence prior to 1964: Registered Files (General Series) 1942-1976
- DEFE 11: Ministry of Defence: Chiefs of Staff Committee: Registered Files 1946-1983
- DEFE 13: Private Office: Registered Files (all Ministers') 1950-2007
- DEFE 25: Ministry of Defence: Chief of Defence Staff: Registered Files (CDS, SCDS and ACDS (OPS) Series) 1957-1981
- DEFE 69: Ministry of Defence (Navy): Registered Files and Branch Folders 1897-1987
- DEFE 73: Ministry of Defence: Ministry of Defence Headquarters and Joint Service Command: Publications 1962-2000

WO: Records created or inherited by the War Office, Armed Forces, Judge Advocate General, and related bodies 1568-2007

- WO 32: War Office and successors: Registered Files (General Series)
- WO 116: Royal Hospital, Chelsea: Disability and Royal Artillery Out-Pensions, Admission Books
- WO 163: War Office and Ministry of Defence and predecessors: War Office Council, later War Office Consultative Council, Army Council, Army Board and their various committees: Minutes and Papers 1806-1973.
- WO 216: War Office: Office of the Chief of the Imperial General Staff Papers 1935-1964

- WO 276: War Office: East Africa Command: Papers 1902-1964
- WO 288: War Office: Suez Campaign Headquarters: Papers and War Diaries 1956-1958

Royal Marines Museum (RMM): Portsmouth, UK
Archives (Arch)

- ARCH – Archives Files

Library (Lib)

(ii) United States

Army Historical Center (AHC): Ft. Myers, Washington, DC

Army Heritage and Educational Center (AHEC): Carlisle Barracks, PA
Army Heritage Collection Online (ACHO)

- [see below]

Library

- MHI (Military History Institute) Stacks

Marine Corps Research Center (MCRC): Quantico, VA
Archives Branch (AB)

- EF – Exercise File
- HAF – Historical Amphibious File

Library Branch (LB)

National Archives and Records Administration II (NARA II): College Park, MD

RG 127: Records of the United States Marine Corps

- Administrative Division – Historical Branch (AD-HB)
 - C&RR – Correspondence and Related Records, 1916-66
 - FMFPACR – FMFPAC Records, 1948-78
 - QS/VCMCD/VKI – Quantico Schools, 1947-70 /Various CMC Documents, 1952-70/Various Korea Information, 1950-59
 - VHQMCD – Various HQMC Documents, 1951-63
- Division of Operations and Training (DO&T)
 - RTE&M – Records of Training Exercises and Maneuvers, 1941-50
- History and Museums Division (H&MD)
 - DP&PMR – Division of Plans and Policies Miscellaneous Records, 1946-81
 - GSF – General Subject File, 1940-53
 - MSF – Miscellaneous Subject File, 1943-80
 - R&ORRKWMO – Reports and Other Records Relating to Korean War Military Operations
 - RCRO&P – Reference Compilations Related to Organization and Policy (“Reference Notebooks”), 1964-75
 - RG&AU – Records of Ground and Amphibious Units, 1960-86
 - RRDAWD – Records Relating to the Development of Amphibious Warfare Doctrines
 - RRKW&SO – Records Relating to Korean War and Subsequent Operations, 1950-59
 - RRRKWPOWAO&AC – Records Relating to Korean War POWs, Amphibious Operations and Air Combat
 - RRMOP&O – Records Relating to Military Operations, Programs and Organization, 1947-76
 - RRO&E – Records Relating to Operations and Exercises

- RRPAUSMCR&HS – Records Relating to Public Affairs, USMC Reserve and Historical Studies, 1942-88
- RRPKWMO – Records Relating to Post-Korean War Military Operations, 1958-75
- RRPPA&AO – Records Relating to Plan, Policies, Aviation and Amphibious Operations, 1942-72
- RRPWMOT&O – Records Relating to Post-War Military Organization, Training and Operations, 1948-77
- RRPWMPPPO – Records Relating to Post-War Military Planning, Programs and Organization, 1945-80
- RS&PRWWIIMO – Reports, Studies and Plans Relating to WWII Military Operations, 1941-56
- RU&OC – Records of Units and Other Commands, 1953-95
- SFRWWII – Subject File Relating to WWII
- USMCE – USMC Exercises, 1960-83

RG 218: Records of the Joint Chief of Staff

RG 337: Records of Headquarters Army Ground Forces

RG 338: Record of US Army Operational, Tactical, and Support Organizations

RG 428: General Records of the Department of the Navy, 1947-

- ROCNO – Records of the Office of Chief of Naval Operations

National Defense University (NDU): Washington, DC

- Library

Naval History & Heritage Command (NHHC): Washington, DC [formerly Naval Historical Center—NHC]

Navy Library (NL)

Operational Archives Branch (OAB)

- P1946CF – Post-1946 Command File
 - NWPPS – NWP Publications Series
 - TPF – Tactical Publications File
 - USFPS – USF Publication Series
- PWWIICF – Post-World War II Command File
 - USFPS – USF Publications Series
- SPDR – Strategic Plans Division Records
- WWIICF – World War II Command File
 - USFPS – USF Publications Series

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(ii) Doctrinal Manuals

United Kingdom

- AWHB – Amphibious Warfare Handbook
- COHB – Combined Operations Handbook
- COP – Combined Operations Pamphlet
- MCO – Manual of Combined Operations

United States

Air Force:

- AFM – Air Force Manual

Army:

- FM – Field Manual

Marine Corps:

- AM – Amphibious Manual
- FMFM – Fleet Marine Force Manual
- LFB – Landing Force Bulletin
- LFM – Landing Force Manual
- MCDP – Marine Corps Doctrinal Publication
- PHIB – Amphibious [Manual]

Navy:

- FTP – Fleet Tactical Publication
- NWIP – Naval Warfare Information Publication
- NWP – Naval Warfare Publication
- USF – United States Fleet [Publication]

Joint:

- JAAN – Joint Action of the Army and Navy
- JAAF – Joint Action Armed Forces
- JP – Joint Publication

(iii) Books

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United Kingdom

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- *BA – Brassey's Annual, The Armed Forces Yearbook* (formerly *BNA*; later *BAD&AF*)
- *BAD&AF – Brassey's Annual, Defence and Armed Forces* (formerly *BA*; later *R&BDY*)
- *BNA – Brassey's Naval Annual* (later *BA*)
- *CBH – Contemporary British History*
- *DS – Defence Studies*
- *JRUSI – Journal of the Royal United Services Institute* (later *RUSIJ*)
- *JSS – Journal of Strategic Studies*
- *R&BDY – RUSI and Brassey's Defence Yearbook* (formerly *BAD&AF*)
- *RUSIJ – Royal United Services Institute Journal* (formerly *JRUSI*)

United States

- *AH – Army History: The Professional Bulletin of Army History* (formerly *TAH – The Army Historian*)
- *IJNH – International Journal of Naval History* [online]
- *IS – International Security*
- *JFQ – Joint Force Quarterly*
- *JMH – Journal of Military History* (formerly *MA*)
- *MA – Military Affairs* (later *JMH*)
- *MCG – Marine Corps Gazette*
- *MR – Military Review*
- *NH – Naval History*
- *Parameters –*
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- *USNIP – United States Naval Institute Proceedings*

(ii) **Books**

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PUBLISHER ABBREVIATIONS:

- CUP: Columbia University Press
- NIP: Naval Institute Press
- OUP: Oxford University Press
- SUP: Stanford University Press

(iii) *Miscellaneous Publications (i.e., monograms, monographs, etc.)*

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III. WEBSITES

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- <http://www.history.navy.mil/danfs/index.html>

Haze Gray & Underway: Naval History Information Center

- http://hazegray.org/navhist/carriers/us_assau.htm

International Journal of Naval History:

- www.ijnhonline.org/archives.html

Naval History & Heritage Command (formerly Naval Historical Center)

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